

Flight, July 22, 1911.

FLIGHT

First Aero Weekly in the World.

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport.

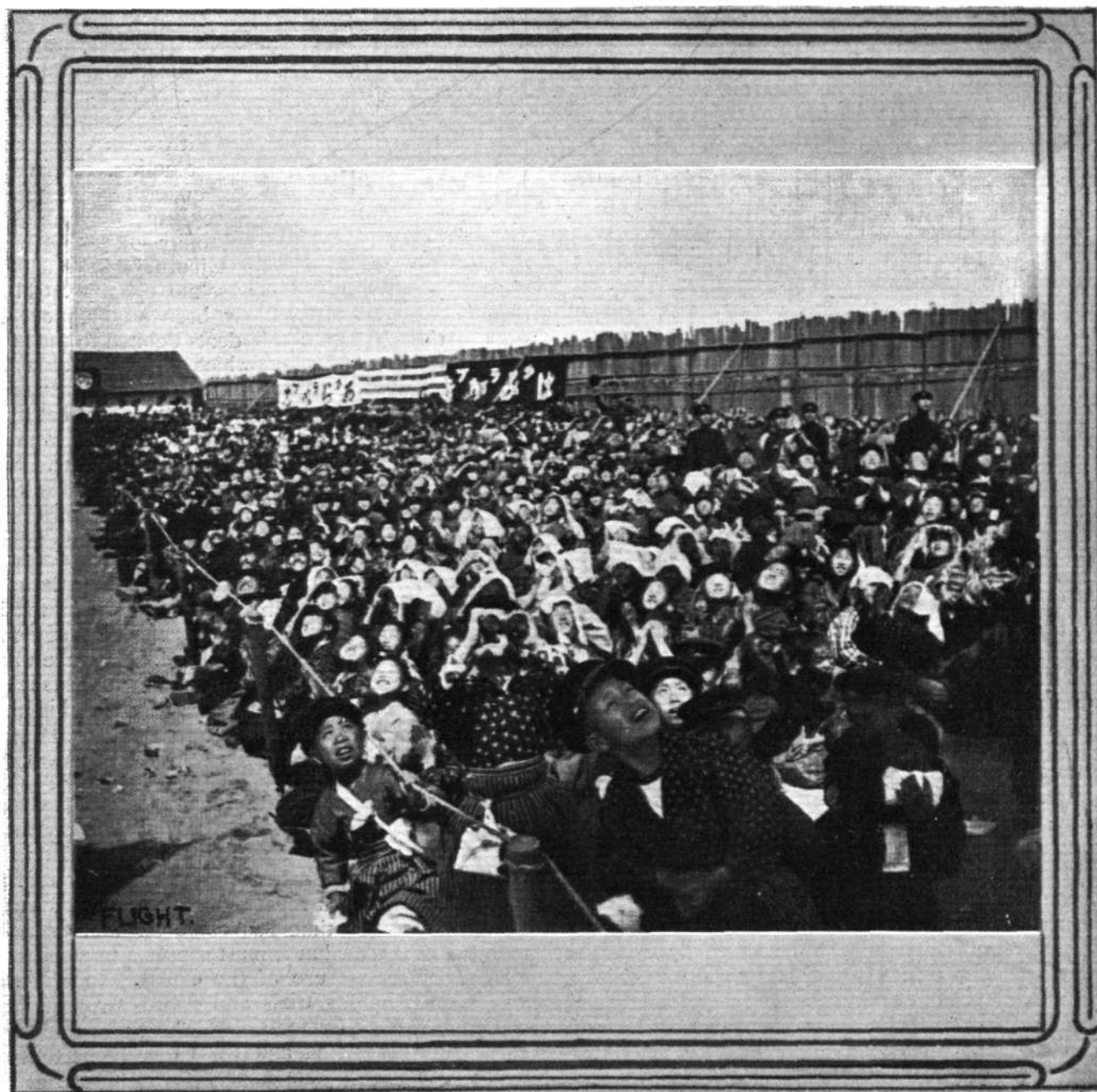
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JULY 22, 1911.

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AVIATION IN JAPAN.—An enclosure of natives "viewing" the late Mr. Mars during one of his exhibition flights recently at Nagoya (see also page 643).

THE CIRCUIT OF BRITAIN.

TO-DAY there starts what is beyond all doubt the most important competition that has taken place in the brief history of dynamic flight. We refer, of course, to the Circuit of Britain, for which the *Daily Mail* has generously provided a magnificent prize in cash—one that is well worth the winning, and which should enable the fortunate aviator who succeeds in gaining it to carry on his work free of the limitations imposed by want of the necessary financial resources to continue experiment.

We have described this event as the most important of all that have hitherto been organised. Some may possibly think that we are inclined to give it undue value and that there have been others—such as the recently concluded European Circuit, for example—which have been at least its equals in interest and in influence on the movement. From the standpoint of mere interest we are willing to concede that the European Circuit was at least the equal of the race which starts from Brooklands this afternoon, but when that is said all has been said that is possible. As indeed we pointed out last week, this competition is unique in the test it imposes on man and machine—particularly on the latter. It is one thing to scramble through a long circuit, favoured it may be by luck and superior organisation, which may easily turn the result in favour of an inferior machine, piloted by one who may be a long way from being the best of those competing. But to successfully bring *one* machine through such a test as the Circuit of Britain promises to be, is in a different category altogether. While other like events have been races pure and simple, to be won anyhow as it were, the British Circuit will be in effect a searching reliability trial, and it is from this point of view alone that it should be regarded. True, it is a race also in which the first to arrive at the finishing point, having complied with all the conditions, will be the winner, but it is nevertheless as a reliability trial first and foremost that it has to be regarded. This is where its chief value lies. It has been demonstrated time and again that the aeroplane is capable of traversing great distances—especially when attended by a fleet of motor cars carrying enough spare parts to rebuild the machine. It has been proved that a long distance race can be won by a machine whose entrant has organised his supplies properly and who has seen to it that he is well equipped with spares, even to duplicate machines, so what need to continue along what we may call the unrestricted lines? The time, in our judgment, has gone by when it was necessary to hold out encouragement to the man first and the machine afterwards. In the earlier stages of flight it was undoubtedly the former who required spoon-feeding with large money prizes. He was a pioneer and an enthusiast—else he would not have been at the game—and after the manner of his kind he was generally blessed with more enthusiasm than money. It is ever the case that the pioneer has an up-hill fight. The pioneer of flight has been no exception to this almost immutable rule, but he has been more fortunate than most in arousing that sort of practical interest which leads to the untying of the purse-strings, and it is to that fact mainly that we owe the phenomenal progress which the science has made during the past three years. To go back only a little way, the motor car had to fight its own way in the face of almost every imaginable discouragement. Its pioneers had to finance it out of their own pockets and to fight their battles for themselves. Fortunately for progress, the story of flight, thanks to munificent persons and corporations like the

proprietors of the *Daily Mail*, has been written differently. As it has been in the past, so we look to see it in the future. Although much has been done there still remains a lot to be achieved, and we still have to look to the generosity of the friends of the movement to help us to do it. That the needed encouragement will be forthcoming we have no manner of doubt and the question we must set ourselves to answer is that of how best to apply that help. In this connection we believe that the manner of carrying out the Circuit of Britain supplies the needed answer. The day of the circus type of performance has admittedly gone by. The “flying meeting” of the early days has gone to a limbo from which it will in all human probability never be resurrected—for which relief much thanks. The cross-country race of the go-as-you-please character is following it, simply because the public is becoming instructed in the lore of flight and is beginning to see that these events prove next to nothing of value. The man in the street does not want it demonstrated to him that it is possible to fly across country. He knows that by this time—unless he be of the kind whose interest is not worth cultivating. Having got the first main lesson driven home, the next stage is to demonstrate that the aeroplane is fit to rank with other vehicles of the land and water as a means of locomotion. The very first and most essential point that requires to be brought out in this respect is that the aeroplane is first and last an instrument of reasonable reliability—one that can be depended upon to make its journeys in safety, with reasonable speed and with absolute certainty. The first two qualifications have already been amply proved. In spite of the number of accidents debited to the account of the aeroplane, accidents which were inevitable at the stage to which we had arrived when the majority of them happened, it is now proved beyond question that flying is a reasonably safe pursuit and that, what is even more important, it is becoming safer every day. So far as speed is concerned—well, ninety miles an hour at this early stage of development promises fairly well for the future. Now we come to the last of our three qualifications—reliability. Those of us who give our time to the study of flight and its collaterals know that even now the aeroplane and its motor have got to a point at which they may fairly be described as dependable quantities. To argue that we have got to the ultimate point of absolute reliability would be as futile as it would be foolish and we do not propose to do anything of the kind. Just how reliable the aeroplane really is or how little it can be depended upon we frankly confess we do not know, and it is fair to ask how, if that is the case, the man in the street can pass judgment? That is where the Circuit of Britain comes in—it will undoubtedly be above all things informative. Not only will it tell the ordinary person, with no pretensions to special knowledge, just what he can expect a machine to do in the event of his deciding that the time has come for him to make his journeys in the air, but it must supply a mass of detailed information for the use of the expert. In the days of motor car reliability trials and racing, we used to hear many and florid arguments about “improving the breed.” Beyond doubt racing and trials did afford much data which went towards that improvement, and it is because the Circuit must of necessity afford that same sort of information that we are so enthusiastically in favour of it as a type event. More than anything that has gone before, it must tend to “improve the breed.”

THE BREGUET AEROPLANE.

At a time when everything in aeronautics is virtually new it seems inappropriate to refer to any particular machine as out of the ordinary, but the stereotyping influence of the popularity of one or two leading makes has already had a marked tendency in fixing ideas in aeroplane construction so that it is, after all, a matter of

serves to emphasise the completeness of the steel structure and also happens to be invisible in the accompanying illustrations. Another important feature of the Breguet design, which is now becoming more common, is the monoplane type body in conjunction with biplane wings. This firm was one of the first to introduce the

combination, and, indeed, M. Breguet was in the habit of describing his aeroplane as a double monoplane, but this definition is not in accord with our own terminology, and it seems to us impossible to regard the Breguet aeroplane as other than a biplane pure and simple, for the planes are unquestionably superposed and their only difference is one of span. The span of the upper plane is, as a matter of fact, very much greater than that of the lower plane.

In the construction and mounting of the main planes the outstanding feature that is apparent from a glance at the accompanying illustrations is the use of a single row of struts, whereas most biplanes have their wings separated by a double row of struts. The presence of only a single row of struts is an indication of the presence of but one main spar and, indeed, the real feature of the Breguet planes is related

to this fact. The surfacing material is stretched on ribs that are in themselves flexible and have in addition a flexible attachment to the tubular steel main-spar. (The constructive detail is mentioned in Patent No. 7209 of 1909.) The result is an automatically variable angle of incidence, which the makers also claim acts in the nature of a spring suspension, or, shall we say, "shock damper" in the air.

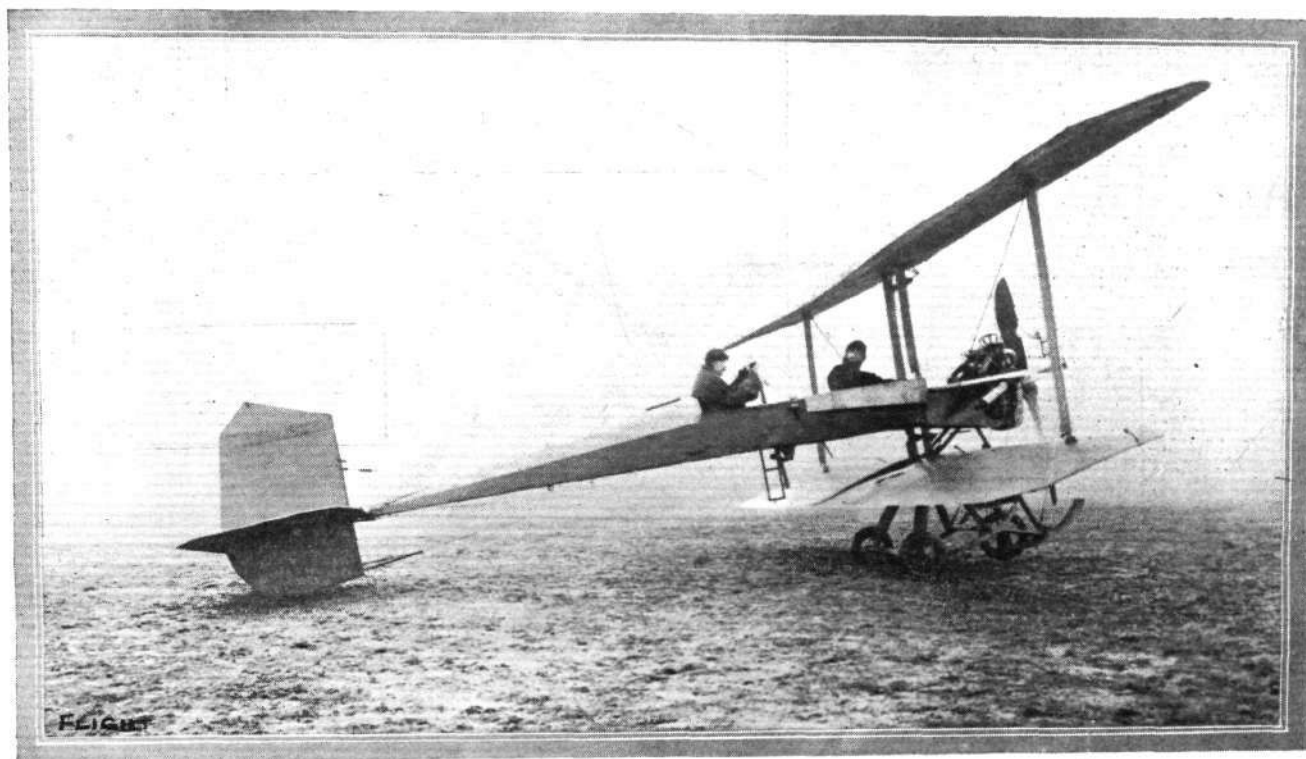
(To be concluded.)



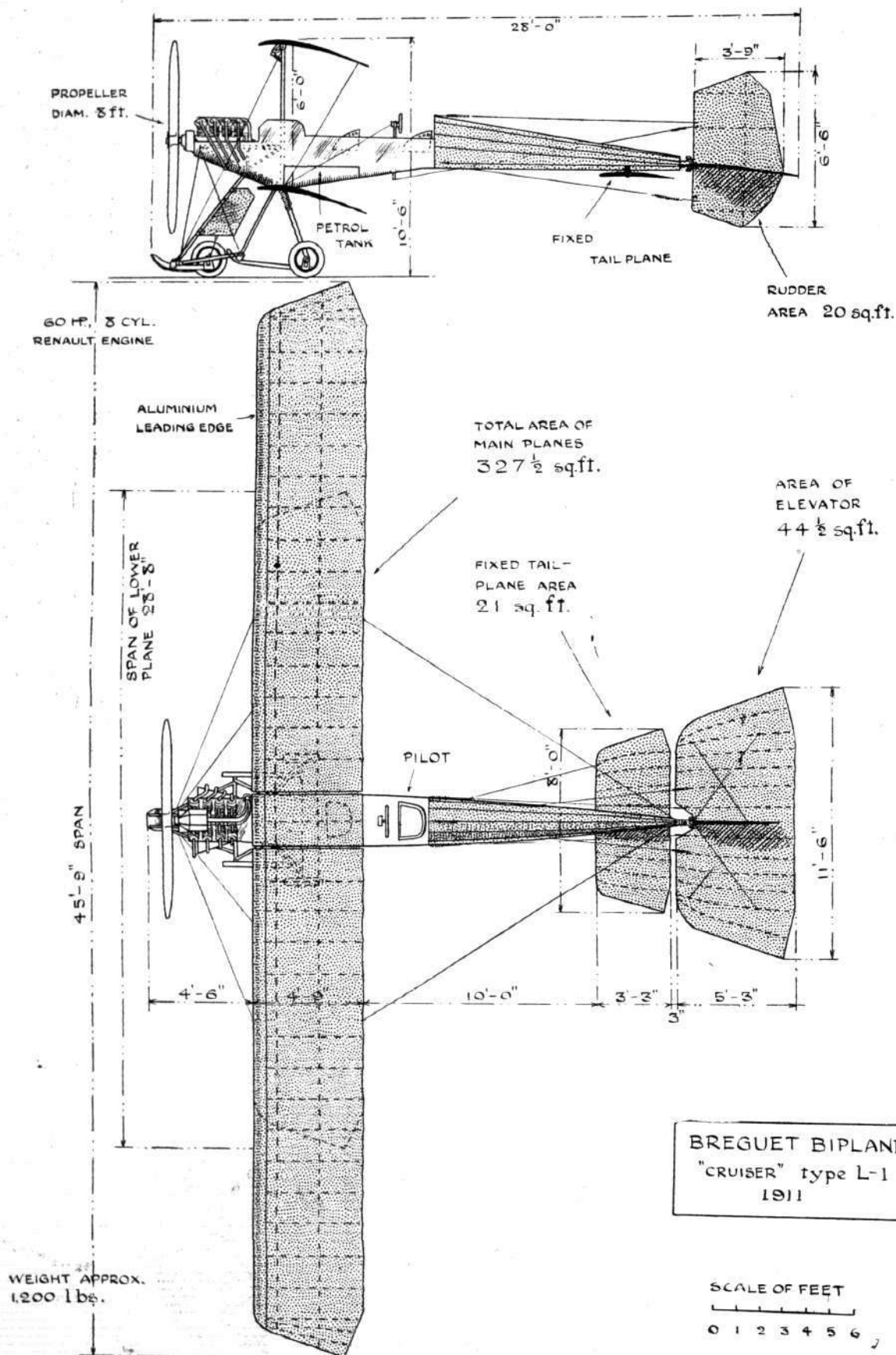
General view of the Breguet biplane from in front.

necessity to say of the Breguet aeroplane that it is a machine of uncommon design and exceptional interest.

In the first place it is built of steel throughout, whereas most aeroplanes are built of timber with minor metal fittings. The body of the Breguet aeroplane has, in fact, a frame built up with pressed-steel channel-section side members just like the frame of the chassis of a motor car, which point is worthy of immediate reference as it

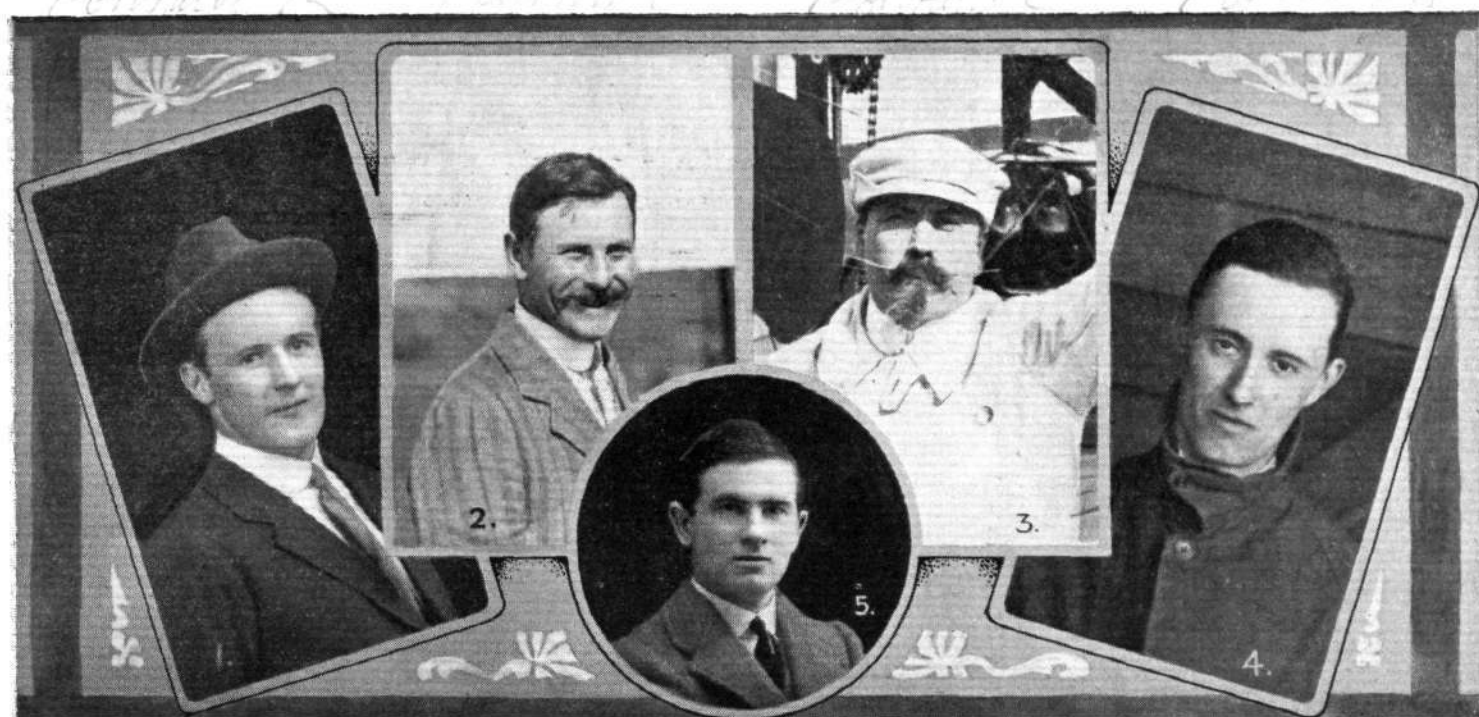


Side view of the Breguet biplane.



THE BREGUET BIPLANE.—Plan and Elevation to Scale.

THE "DAILY MAIL" CIRCUIT OF GREAT BRITAIN.



SOME BRITISH PILOTS IN THE DAILY MAIL CIRCUIT OF GREAT BRITAIN.—1, James Radley. 2, C. Compton Paterson. 3, S. F. Cody. 4, J. D. Astley. 5, R. C. Fenwick.

BEFORE entering into details as to the arrangements and the competitors taking part in the great race which starts from Brooklands to-day a few words may be said as to the origin of the event. After the historic struggle between Grahame-White and Paulhan for the

first £10,000 prize offered by the *Daily Mail* for a flight from London to Manchester, the two competitors and others concerned were entertained at a *déjeuner* given at the Savoy Hotel on April 30th last year. In asking M. Cambon, the French



The Septette of "Bristol" pilots in the *Daily Mail* Circuit of Great Britain.

Ambassador, to present the prize to M. Paulhan, Mr. Thos. Marlowe, the editor of the *Daily Mail*, who presided in the absence through indisposition of Lord Northcliffe, said he was authorised to announce that a second prize of £10,000 would be offered. The conditions could not then be made public, but one proposal was that it might be given for a flight to Edinburgh and back and to Paris and back. Suggestions were then invited, and it was ultimately decided that the competition should take the form of a tour round Great Britain, the distance to be about 1,000 miles, similar to that of the first great motor car trials which played such an important part in the development of the self-propelled vehicle. The Committee of the Royal Aero Club then set to work, in consultation with the proprietors of the *Daily*

Mail, to draw up the rules, and after a good many meetings the rules which are given practically in full on p. 634 were agreed to. At first it was suggested that the route should include a call in the Isle of Wight, but this was abandoned owing to the difficulties connected with the crossing of the sea. Later, upon representations of the importance of Salisbury Plain to military aeronautics, it was decided to make that the stopping place *en route* to Brighton.

From the rules it will be seen that the prize of £10,000 is to be awarded to the aviator who makes the journey in the shortest time subject to his duly observing the regulations as to compulsory "resting" times, &c.

There are other prizes to be fought for in between; for instance, Sir George White, chairman of the British and Colonial Aeroplane



Pilots in the *Daily Mail* Circuit of Great Britain, who will be in charge of foreign-built machines, with the exception of Mr. R. C. Kemp, who will pilot a British-built Avro biplane:—1. G. Blanchet; 2. J. Valentine; 3. J. Vadrines; 4. Lieut. H. Bier; 5. A. Beaumont; 6. R. C. Kemp; 7. O. de Montalent; 8. Wynmalen; 9. Lieut. J. C. Porte; 10. G. Hamel; 11. E. Audemars.

Co., has offered £250 for the first machine which completes the race with most of its previously stamped parts in place, the winner of the big prize being excluded from this.

The British Petroleum Co. has also offered a prize of 125 guineas under similar conditions; the Brighton Hotels Association will give a 100-guinea gold cup to the first British aviator to reach Brighton; the fastest trip between Hendon and Harrogate will secure for the pilot the silver cup offered by Mr. Ogden; while the British pilot to make the fastest trip between the same two points will receive a 50-guinea tea service from the Harrogate Chamber of Trade.

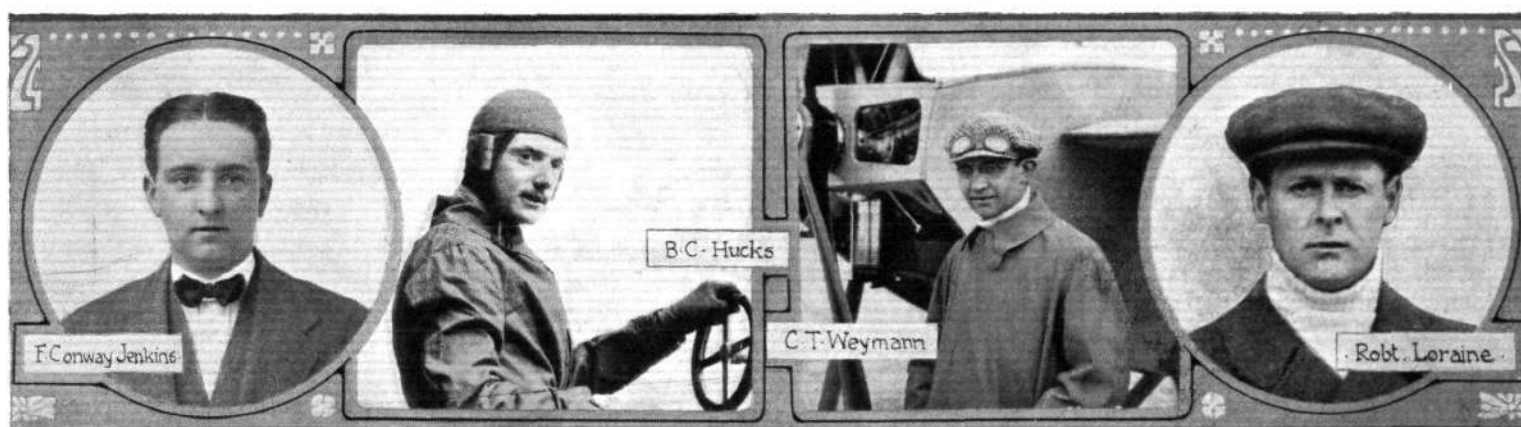
It will be noticed that a great difference between this event and the others which have recently taken place on the Continent is that an endeavour is being made to ensure that at least some essential parts of the original engine and machine which starts out shall go to make up the machine which finishes. In the three great cross-country events recently concluded, as soon as a machine went wrong, the pilot simply changed over to another mount, with which he continued on his way. As, however, reliability is a feature which is most desirable, the *Daily Mail* contest seeks to encourage it. Five parts of each machine and a similar number of parts of the motor will be stamped or sealed, and at least two of each of these five parts must be in position on arrival at each control. This regulation does not, however, affect landing chassis or propellers.

The Machines.

In view of the fact that speed must necessarily play a large part in the competition, it is hardly to be surprised at that the monoplane type of machine is the more favoured, and as a matter of fact it will be seen on reference to the starting list that there are 50 per cent. more of the single-deck machines than biplanes, there being eighteen of the former and twelve of the latter. The largest team among the monoplanes is the Blériot, which have four representatives. Of these, that flown by Lieut. Cammell is the one which was staged at the last Olympia Show, while the others are pretty sure to be of the latest type shown in our sketch this week, similar to that flown by "Beaumont" in the European Circuit. From this it will be seen that the design follows general Blériot practice, except that the tail plane has hinged flaps to form the elevator instead of the movable tips formerly used. Special



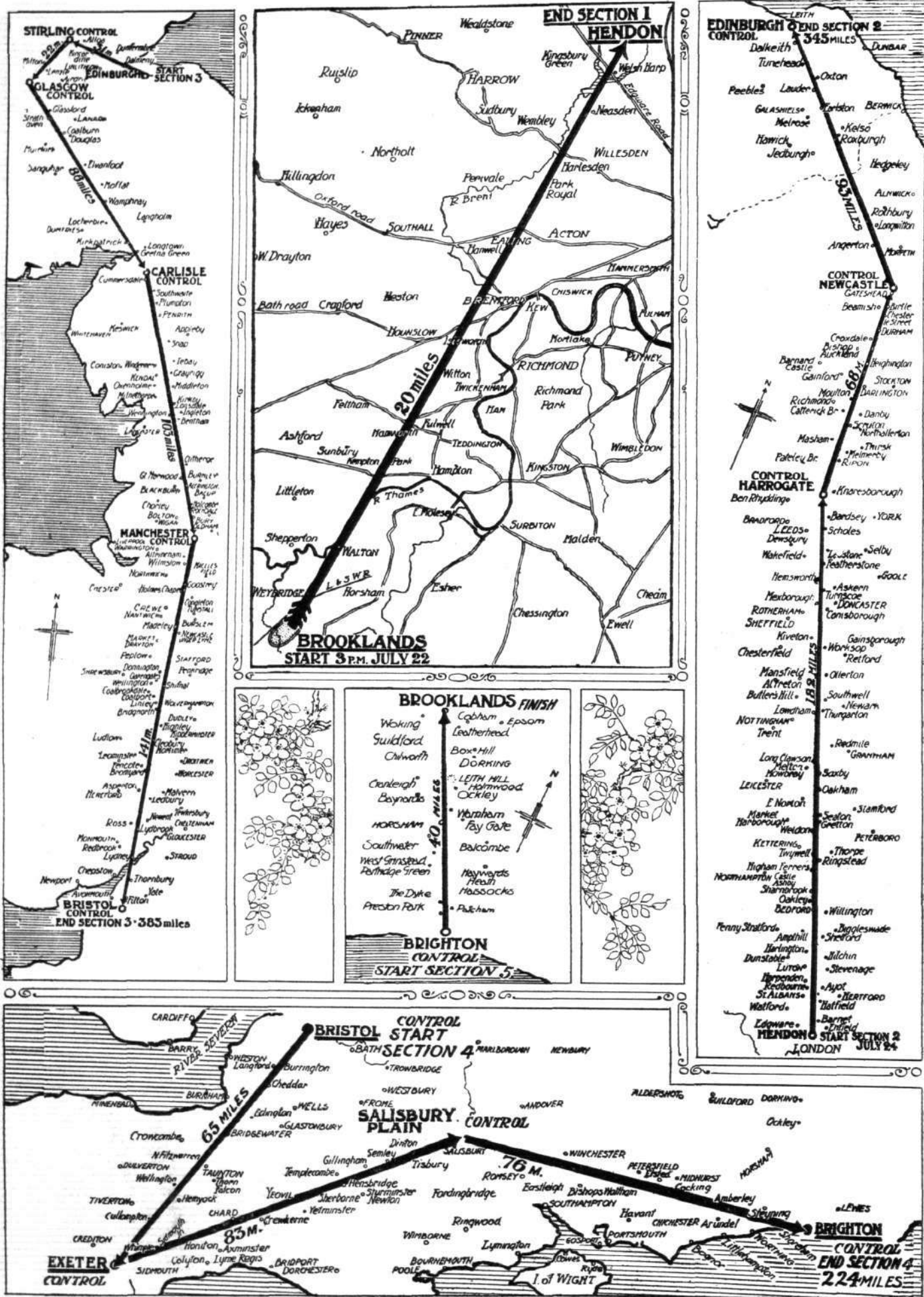
DAILY MAIL CIRCUIT OF GREAT BRITAIN.—Sketch map of the route showing the various sections and distances.



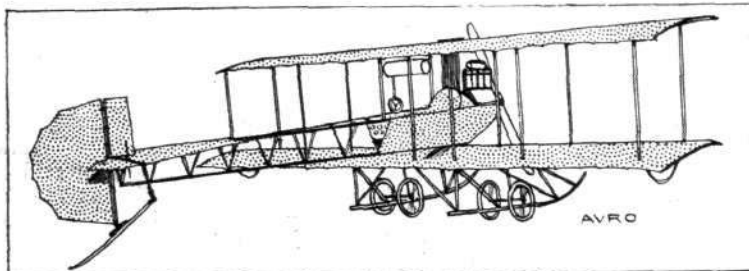
Pilots of the Blackburn monoplanes.

Pilots of the Nieuport monoplanes.

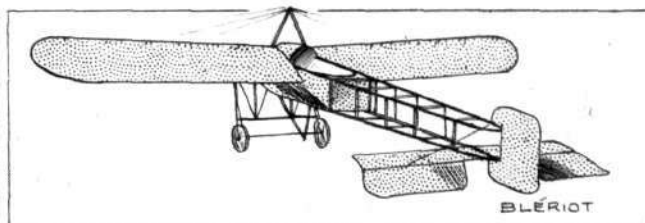
THE DAILY MAIL CIRCUIT OF GREAT BRITAIN.



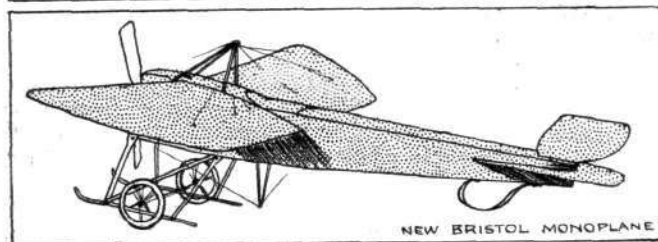
THE DAILY MAIL CIRCUIT OF GREAT BRITAIN.—Sketch map showing the five sections separately, starting from Brooklands.



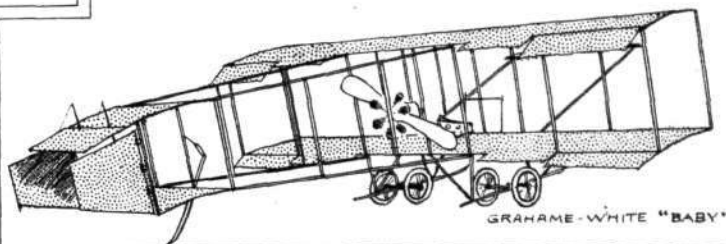
AVRO



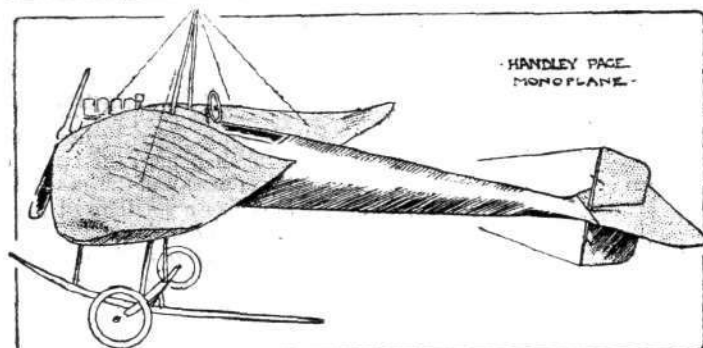
BLÉRIOT



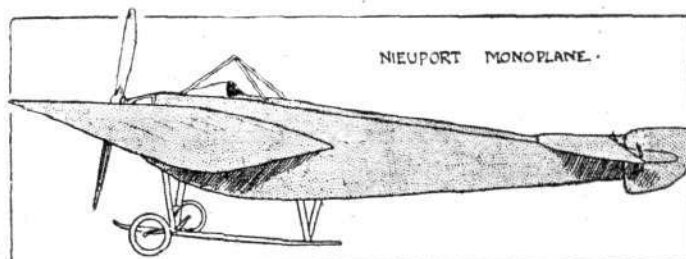
NEW BRISTOL MONOPLANE



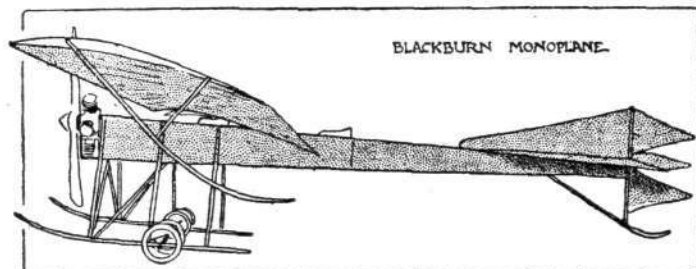
GRAHAME-WHITE "BABY"



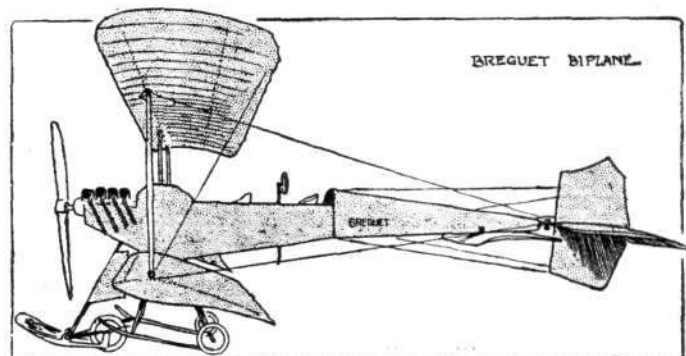
HANDLEY PAGE MONOPLANE



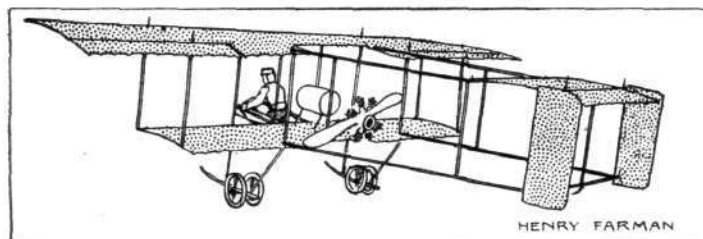
NIEUPORT MONOPLANE



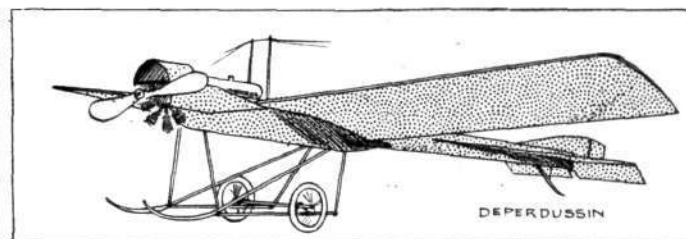
BLACKBURN MONOPLANE



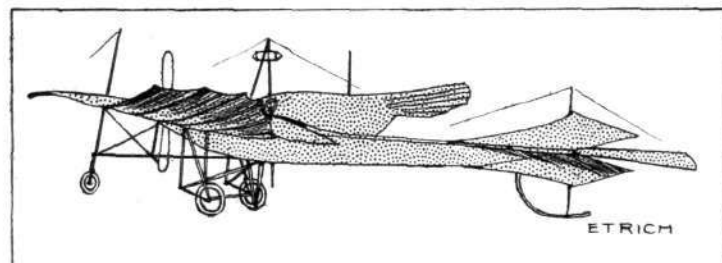
BREGUET BIPLANE



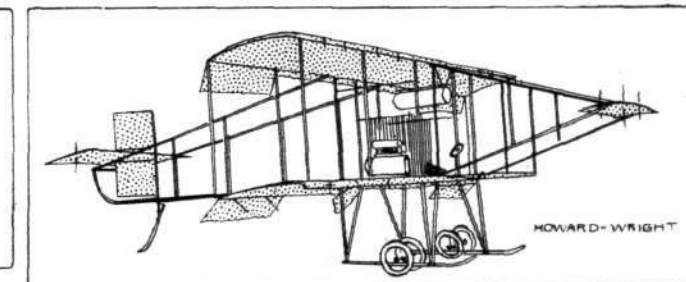
HENRY FARMAN



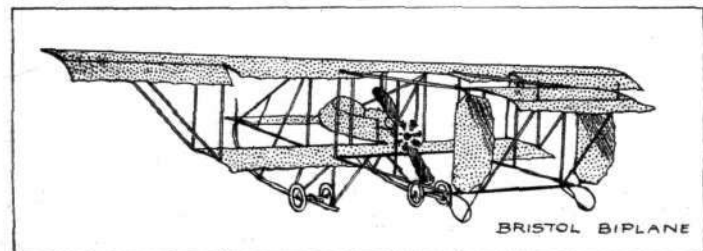
DEPERDUSSIN



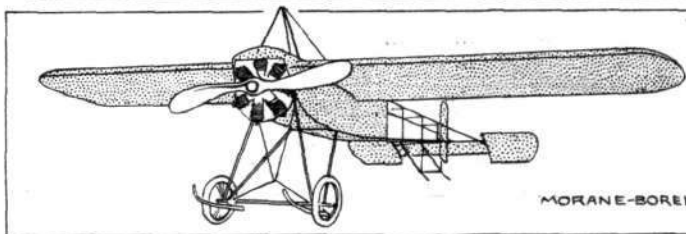
ETRICH



HOWARD-WRIGHT



BRISTOL BIPLANE



MORANE-BOREL

MONOPLANES AND BIPLANES IN THE DAILY MAIL CIRCUIT ROUND GREAT BRITAIN.—From these every machine can be readily identified either in flight or on the ground.

interest attaches to the two new Bristol monoplanes, which are to be piloted by M. Pierre Prier and Mr. O. C. Morison. The general arrangement of the design of these machines can be gathered from the photographs which we publish on p. 633. The most striking features of the design are the substantially built under-carriage, the covered-in body and the small area of the rudder and tail. There will be another team of two British-built monoplanes—those constructed by the Blackburn Aeroplane Co. At the last Olympia Show this machine, which is of the Antoinette type, attracted a good deal of attention by reason of its well finished appearance. In the hands of Mr. Hucks it has proved to be a very fast machine. Of the two other British monoplanes very little is known as to their capabilities, but the Handley Page machine, when exhibited at the last Olympia Show, elicited a good deal of favourable comment although the design was considerably off orthodox lines. The leading edge of the main plane has a crescent form and the dihedral angle is present to a minor degree in the upturned flexible wing tips.

The Morane machines are similar in many ways to the Blériots, and the chief difference in outward appearance lies in the under-carriage, the general arrangement of which can be gathered from our sketch. It will be noticed that short skids are fitted alongside the wheels. The other French monoplanes are quite distinctive in appearance, the Deperdussin, by the way, in which the engine and propeller protrude in front, and by the sharp corners to the rudder, which is hinged to the stabilising fin above the fuselage, and the elevating flaps which are hinged to the rear edge of the fixed tail plane. Another feature by which they may be recognised is the two short masts to which the stay wires on the upper side of the main plane are attached. The Nieuport machine is a squat looking little flyer, but by its victory in the Gordon-Bennett race it proved itself a remarkably efficient machine. Its distinguishing features are the semi-circular elevating flaps, which are hinged to the fixed tail plane, and the central skid, in which respect the machine resembles the Handley Page monoplane. The Etrich monoplane to be flown by Lieut. Bier has quite an unusual appearance, due to the flexible tips at the extreme rear extremities of the main plane, as well as the girder frame-work which strengthens the main spar. The two masts which pass through the main plane to carry some of the stay wires, and have wheels at their lower end, are also unusual features.

Turning to the dozen machines of the biplane type, it will be

observed that five are "Bristol" products of the British and Colonial Aeroplane Co. These Bristol biplanes are similar to that used by Tabuteau in the European Circuit, and differ from the ordinary type of machine, chiefly in the monoplane tail with the single rudder beneath it, while another point of difference is that the skids are continued up to meet the elevator outrigger framework, as in the Maurice Farman biplane. The pilot is also protected by a torpedo-shaped screen. The Howard Wright biplane remains unaltered from the time it was fully described in the pages of FLIGHT on December 24th last year. A point by which it may be known when flying is that the tail is of the cruciform type. The Grahame-White "Baby" biplane is also practically unaltered since it was exhibited at Olympia, and fully described in FLIGHT for March 25th last. It has a biplane tail, with an elevator flap fixed to the top plane, and twin rudders beneath it. The Avro biplane has the engine and propeller in front, which fact alone would almost enable anyone to recognise it, as the Breguet biplane machine, which is the only other biplane in the competition so fitted, is of quite distinctive appearance. The Avro biplane has a fixed tail plane, with elevating flaps and a single rudder. The machine on which Mr. Cody intends to take part in the contest is a new one, but its design follows the general lines of that with which he won the Michelin Trophy last year. The machine, however, has no balancing ailerons between the main planes, and double rudders are fitted at the rear instead of the cruciform tail used on the old machines. In this respect Mr. Cody is reverting to the design of one of his earliest biplanes. An outstanding feature of the Breguet machines, of which two are to take part, is the all-steel framework. As we have said the propeller is arranged in front of the main planes, the upper of which is of much larger span than the lower one, and the cruciform tail is hung on a universal joint. There is also a small fixed plane at the rear of the monoplane type body. The remaining biplane is that built by Henry Farman for Wynmalen. Here again it will be quite easy to know it from the other biplanes because there is no elevator, and although the tail is of the monoplane type, the rudders are in duplicate, one being placed at each side of the elevating flap. It is to be regretted that no Wright or other machine fitted with the British built N.E.C. engine, which showed up so well for steadiness and reliability in the Gordon-Bennett Race, has been entered to take part, as its performance in such a contest would have been watched with more than ordinary interest.

THE PILOTS.

The Pilots in the Order of Starting with Official Numbers.

Aviator.	Aeroplane.
1. André Beaumont ...	Blériot monoplane
2. H. J. D. Astley ...	Birdling monoplane
3. Brindejonc des Moulinais ...	Morane-Borel monoplane
4. R. C. Fenwick ...	Handley Page monoplane
5. Lieut. J. C. Porte, R.N. ...	Deperdussin monoplane
6. Ronald C. Kemp ...	Avro biplane
7. C. Compton Paterson ...	Grahame-White "Baby" biplane
8. O. C. Morison ...	Bristol aeroplane
9. Jules Vedrines ...	Morane-Borel monoplane
10. James Radley ...	Antoinette monoplane
11. G. Blanchet ...	Breguet biplane
12. Lieut. R. A. Cammell, R.E. ...	Blériot monoplane
13. E. Audemars ...	Blériot monoplane
14. James Valentine ...	Deperdussin monoplane
15. —	Bristol aeroplane
16. E. C. Gordon-England ...	Bristol aeroplane
17. C. P. Pizey ...	Bristol aeroplane
18. Pierre Prier ...	Bristol monoplane
19. C. Howard Pixton ...	Bristol aeroplane
20. S. F. Cody ...	Cody biplane
21. M. Tabuteau ...	Bristol biplane
22. F. Conway Jenkins ...	Blackburn monoplane
23. Olivier de Montalent ...	Breguet biplane
24. Gustav W. Hamel ...	Blériot monoplane
25. Lieut. Reynolds ...	Howard Wright biplane
26. Robert Loraine ...	Nieuport monoplane
27. B. C. Hucks ...	Blackburn monoplane
28. C. T. Weymann ...	Nieuport monoplane
29. H. Wynmalen ...	H. Farman biplane
30. Lieut. H. Bier ...	Etrich monoplane

Of the thirty flyers who balloted to take part in the event, it seems strange that "André Beaumont," who is Lieut. Conneau of the French Navy in real life, and who, by his victories in the Paris-Rome race and the European Circuit, has made his name famous throughout the world, should have drawn the first place, and his friends not unnaturally look upon this as a favourable omen.

The second place fell to Mr. H. J. D. Astley, who intended using a machine designed by Mr. Macfie, partly upon the lines of the Dunne, but this unfortunately was damaged in its trial outing on Monday last, and Mr. Astley, therefore, will have to fly another machine entered as the "Birdling."

The aviators constituting the Bristol team have all proved strikingly their masterly powers to pilot their way across country, and readers of FLIGHT hardly need any introduction to them in the persons of Messrs. Gordon-England, C. P. Pizey, Howard Pixton, O. C. Morison, Pierre Prier, and Tabuteau. The records of the tour of Mr. Gordon-England and Mr. Pizey in the South of England will still be fresh in their minds. It is unfortunate that Mr. Graham Gilmour will be unable to take part as originally intended owing to his certificate having been suspended by the Royal Aero Club. Mr. O. C. Morison's recent voyage from Paris to Shoreham, Mr. Howard Pixton's daring flights in the gusty winds which have been experienced at Brooklands during the past week or so, M. Prier's non-stop run from London to Paris, and M. Tabuteau's winning of the International Michelin Trophy, are all incidents of which this sextette of flyers may well be proud. Of the remaining British pilots, Mr. Cody is another fascinating personality who by his recent flights to Hendon, and to and from Brooklands in order to keep his engagements there, has demonstrated his ability for cross-country work, and great things are expected of his new machine. Mr. James Radley, who is entered to fly an Antoinette, is the holder of the British speed record, which he gained at the Lanark Meeting last year, and Mr. Gustav Hamel has shown himself to be a "Blériot" flyer of the first order, although in the recent Gordon-Bennett race he was unfortunate. Mr. Robert Loraine, whose flights on his biplane from Blackpool to Ireland and from Bournemouth to the Isle of Wight marked him out as a clever and capable point-to-point flyer, has been practising steadily at Mourmelon on the Nieuport monoplane he will use in the event, and Mr. J. Valentine had some experience on his Deperdussin in the European Circuit which should stand him in good stead. Mr. Compton Paterson, who is taking Mr. Grahame-White's place as pilot on the "Baby" Grahame-White machine, has had lengthy experience—as time goes—of biplane work, both in actual construction as well as flying. The British Army will be well repre-

sent by Lieut. R. A. Cammell, R.E., who has been indulging in quite a deal of practice on his Blériot two-seater over varied country in the neighbourhood of Salisbury Plain, and Lieut. Reynolds who at the last moment agreed to take Pequet's place on the Howard Wright, while Lieut. J. C. Porte, R.N., who has spent considerable time at Rheims making himself thoroughly familiar with his Duperdussin monoplane, will do his best to uphold the reputation of the British Navy. Mr. Conway Jenkins, who will be in charge of one of the Blackburn monoplanes, has hitherto confined his attention principally to biplanes, but his *confrère*, Mr. B. C. Hucks, has had a good deal of experience with the Blackburn monoplane, and has made some very good point-to-point flights in the neighbourhood of Filey and Scarborough. Mr. Ronald C. Kemp, who is entered to fly the E.N.V.-engined Avro biplane, has made many good trips with machines of similar type at Brooklands, while Mr. Fenwick, who will be in charge of the Handley Page monoplane, which is notable as being fitted with a 35-40-h.p. Isaacson engine, is another pilot who hitherto has been mainly identified with biplane work.

Of the other foreign pilots Vedrines is a name to conjure with, and by his winning the Paris-Madrid Race and his very fine performance in the European Circuit, he comes with the best of credentials, while Mr. C. T. Weymann, who won the recent Gordon-Bennett Race for America on his Nieuport monoplane, needs no introduction. M. Wynmalen, who will pilot the only Henry Farman machine in the *Daily Mail* race, took part in the early stages of the European Circuit but was compelled to give up owing to persistent motor trouble. One of his finest cross-country flights was the one from Paris to Brussels and back on October 16th last, which won for him the A.C.F. Grand Prix.

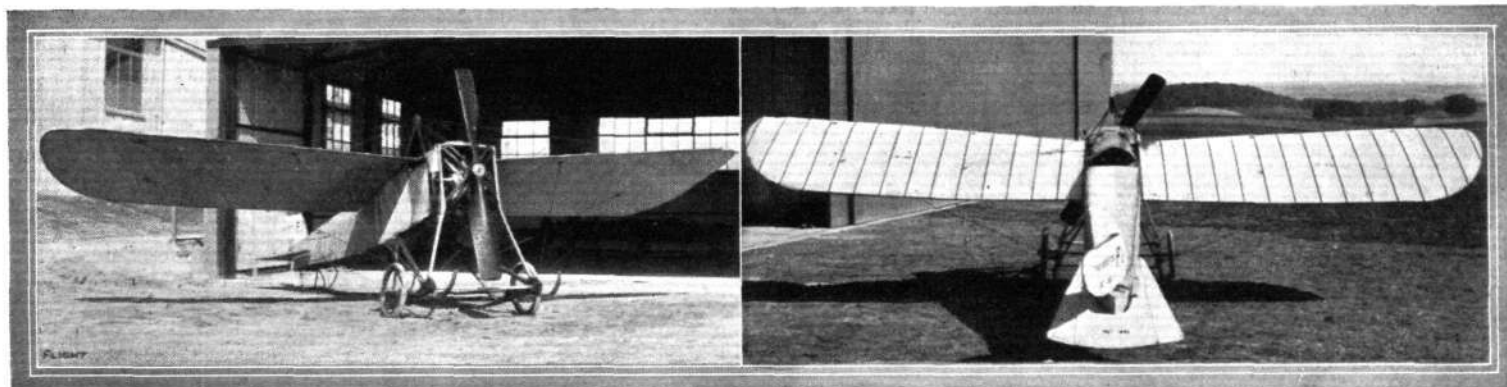
Lieut. Bier, who is the sole representative of Austria, is not very well known outside his own country, but as our readers will remember he has made some very good cross-country voyages, and flew over Vienna in the early part of May last. Audemars is a pilot who has had extensive experience with various machines, and visitors to Bournemouth will not have forgotten his acrobatic performances on the Santos Dumont machine. This time, however, he will be at the *cloche* of a Blériot monoplane.

Of the three remaining pilots Brindejone des Moulinais, who was to have started third on his Morane monoplane, met with an accident during the early part of the week while practising, and so will be unable to take part. Of G. Blanchet and Olivier de

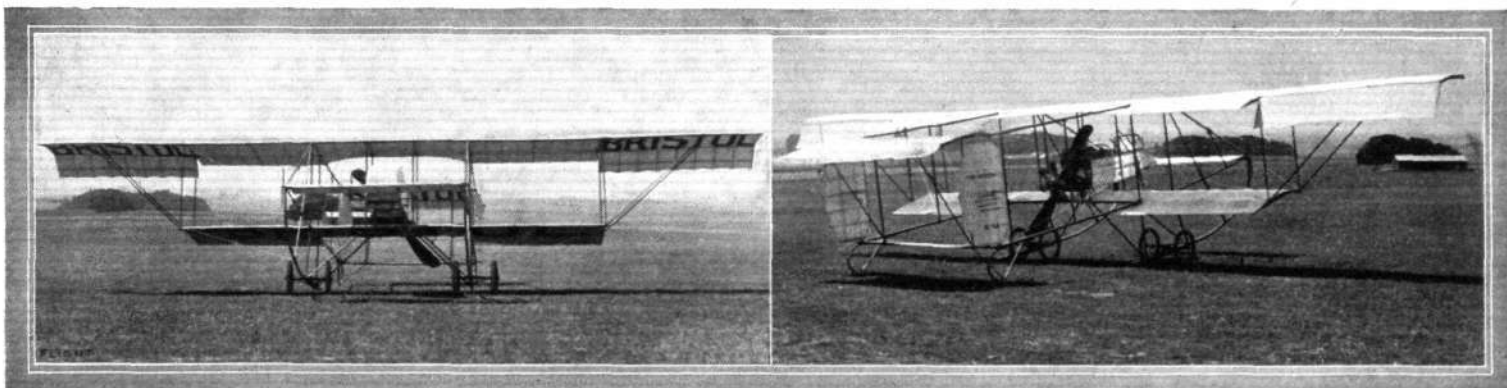


Lieut. Reynolds, of the Air Battalion, who at the last moment has undertaken to pilot the Howard Wright biplane instead of M. Pequet.

Montalent very little is known. In view of the thoroughness which characterises all that M. Breguet's name is put to, they may, however, be relied upon to give a good account of the machines of which they are in charge.



One of the "Bristol" monoplanes, as seen from the front and behind, entered by the British and Colonial Aeroplane Co. for the *Daily Mail* Circuit of Great Britain. Note the small tail of this machine. The length overall is about 8 metres, and the span 10 metres. The area of the main plane is approximately 14 sq. metres.



Views of one of the "Bristol" biplanes entered by the British and Colonial Aeroplane Co. for the *Daily Mail* Circuit of Great Britain. The top plane has a span of 15 metres, while the lower plane is of approximately 8 metres span, the chord in each case being 15 metres. Steel has been substituted for aluminium in the fittings of all machines, and 50-h.p. Gnome engines are fitted to both biplanes and monoplanes.

THE COURSE AND WHERE THE AVIATORS DESCEND.

WITH regard to the route to be followed by the aviators, the sketch maps which we reproduce will enable our readers to follow the course of the various sections with ease. Starting from Brooklands at 3 o'clock to-day (Saturday), the competitors will cross the river between Walton and Shepperton, and, leaving Hampton Court on the right, will continue between Twickenham and Hounslow, past Brentford and Ealing on the right and Harrow on the left to Hendon. This opening trip of twenty miles—the shortest during the whole competition—will conclude the day's work, and the machines taking part will then rest at Hendon during Sunday; a feature which will probably be somewhat novel to the Continental pilots, whose experience has been that Sunday is generally considered a more suitable day for such competitions than any other.

On Monday they will start off in dead earnest, and they will have to be up early, as the first one is timed to get away at 4 a.m. on the 343 mile journey to Edinburgh, with "control" stops at Harrogate and Newcastle. The order of starting from Hendon will be in accordance with the time made on the section from Brooklands to Hendon, the fastest being sent away first, and the others at intervals determined by the difference between the elapsed time over the first section. From Hendon the aviators will set their course practically direct for Bedford, and passing to the east of Kettering, Leicester, Nottingham, and Sheffield, and to the west of Doncaster, they will come in sight of Harrogate and land on the Stray just before reaching the town. This will be the longest stretch without a "control" during the flight. From Harrogate the course will be almost due north, passing to the west of Ripon and Darlington, and skirting Durham, to Newcastle, where the landing place will be Gosforth Park on the further side of the city. From Newcastle the third and last part of the second section will be to Edinburgh, the course being practically north-west, and skirting Roxburgh. The landing place of the Scottish capital is the War Office ground at Colinton, about four miles south-west of Edinburgh.

In order that the aviators may not overtax their strength, it has been decided that each must spend at least 12 hours' "resting time" in each section, and this resting time can be spent either *en bloc* or in short periods at any of the controls in the section. The full time elapsed between one control and another will be counted as flying time against each competitor respectively. Having completed his 12 hours' "rest," the aviator may then start from Edinburgh on the longest section, which after a journey of 383 miles ends at Bristol. The first two stages of this section, however, are not very long ones, controls being established at Stirling, where the aviators will alight in the King's Park to the south-west of the city, and Glasgow, where the "station" will be the racecourse in St. James's

Park, Paisley, some distance to the west of Glasgow. The journey south will then commence, the next control being Carlisle, Gretna Green being passed just before reaching the old racecourse on the banks of the river Eden to the north-east of Carlisle, which forms the control ground. Continuing the journey south, Penrith will be passed to the left as well as Shap and Kirkby Lonsdale, and skirting Accrington and Bury the competitors will make for their halting place at Trafford Park, to the south-west of "Cottonopolis." From there they will have another long run to Bristol, passing through the manufacturing district to Wolverhampton, and then later getting on to the beautiful country in the neighbourhood of the Wye Valley. Crossing the River Severn, they will pass by Thornbury, and just before reaching Bristol, land at Filton. That will be the end of another section.

The fourth section will be from Bristol to Brighton, with two controls, at Exeter and Salisbury. Making their way by Cheddar, Bridgwater, and Taunton, the competitors will reach the Exeter control, which is an open piece of ground near Pinhoe. From there Chard, Yeovil, and Sherborne will be the land-marks to Durrington Downs, Salisbury, which has become famous as a flying ground by reason of the successful school established there by the British and Colonial Aeroplane Company. The course to Brighton, the next stopping place, and end of Section IV, passes to the south of Winchester and Petersfield to the Shoreham Aerodrome, situated to the west of Brighton, which it will be remembered was one of the stations in the European Circuit.

The last section is from Brighton to Brooklands.

Where to See the Aviators.

Brooklands, the Motor Track.
Hendon, London Aerodrome.
Harrogate, The Stray.
Newcastle-on-Tyne, Gosforth Park.
Edinburgh, Military Ground, Colinton.
Stirling, King's Park.
Glasgow, Paisley Racecourse.
Carlisle, Old Racecourse.
Manchester, Trafford Park.
Bristol, Ground at Filton.
Exeter, Ground near Pinhoe.
Salisbury, Durrington Downs.
Brighton, Shoreham Aerodrome.

At most of these grounds a small charge will be made for admission, but at Harrogate, Carlisle, and Salisbury the general public will see all there is to be seen for nothing.

REGULATIONS GOVERNING THIS 1,000 MILE BRITISH CONTEST.

(Under the rules of the Royal Aero Club and the Federation Aeronautique Internationale.)

The Proprietors of the *Daily Mail* have offered the sum of £10,000 to be awarded to the aviator who shall have completed a prescribed circuit of approximately 1,000 miles on an aeroplane in flight in the shortest time within the appointed dates, the award to be made by the Royal Aero Club in conjunction with the Directors of the *Daily Mail*.

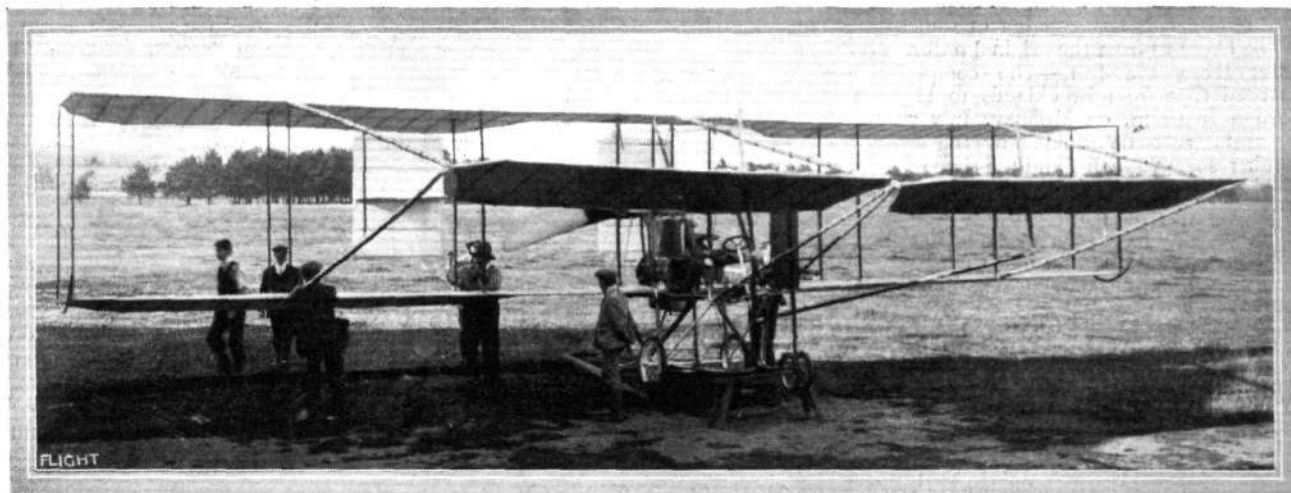
Regulations.

1. **Date of Contest.**—The contest will commence on Saturday, July 22nd, 1911, and will finish at latest, Saturday, August 5th, 1911, at 7.30 p.m.
2. **Qualification of Competitors.**—The contest is open to competitors of any nationality holding an aviator's certificate issued



"Flight" Copyright.

The Howard Wright biplane, which will be steered by Lieut. Reynolds in the *Daily Mail* Circuit of Great Britain.



The new Cody biplane, constructed to take part in the *Daily Mail* Circuit of Great Britain.

by the International Aeronautical Federation, and duly entered on the competition register of the Royal Aero Club.

3. **Entries.**—The entrance fee is £100, and entries, which must be made by the competitor himself, will be received up to 12 noon, June 20th, 1911. The entrance fee of £100 is payable either in one sum or as follows:—

£25 by 12 noon on June 20th.
£75 " " July 1st.

Late entries will be received up to 12 noon, July 1st, 1911, in which case the entry fee will be £200.

The entry form, which must be accompanied by the entrance fee, must be sent in to the Secretary, Royal Aero Club, 166, Piccadilly, London, W.

No part of the entrance fees is to be received by the *Daily Mail*, but all amounts received will be applied towards payment of the expenses of the Royal Aero Club in conducting the competition.

4. **Course.**—The course is divided into the following sections:—

SECTION 1.—**Brooklands to Hendon (Control)** ... 20 miles.

SECTION 2.—**Hendon to Edinburgh.**

Hendon to Harrogate (control) ...	182 miles
Harrogate to Newcastle (control) ...	68 "
Newcastle to Edinburgh (control) ...	93 "

Total for Section 2 ... 343 "

This Section closes at 4.30 p.m. on Saturday, July 29th, 1911, by which time all competitors must have started in Section 3.

SECTION 3.—**Edinburgh to Bristol.**

Edinburgh to Stirling (control) ...	31 miles
Stirling to Glasgow (control) ...	22 "
Glasgow to Carlisle (control) ...	86 "
Carlisle to Manchester (control) ...	103 "
Manchester to Bristol (control) ...	141 "

Total for Section 3 ... 383 "

This section closes at 4.30 p.m. on Wednesday, August 2nd, 1911, by which time all competitors must have started in Section 4.

SECTION 4.—**Bristol to Brighton.**

Bristol to Exeter (control) ...	65 miles
Exeter to Salisbury Plain (control) ...	83 "
Salisbury Plain to Brighton (control) ...	76 "

Total for Section 4 ... 224 miles

This section closes at 12 noon Saturday, August 5th, 1911, by which time all competitors must have started in Section 5.

SECTION 5.—**Brighton to Brooklands (Final**

Control) ...	40 "
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Total ... 1,010 "

A competitor who has not left the above sections before the specified dates and times will be automatically retired from the competition.

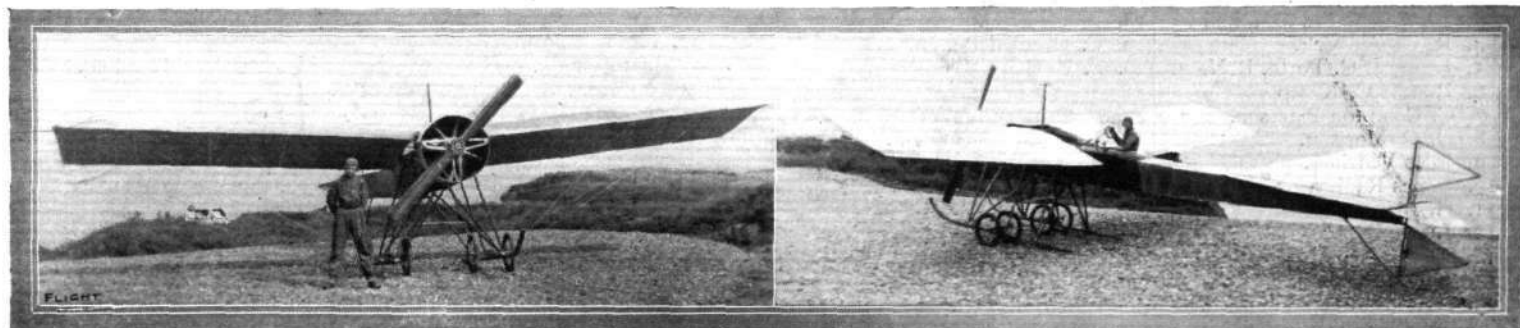
5. **Controls.**—A control is situated in or near each of the towns mentioned in paragraph 4, and competitors must make a landing at each control. The time of arrival will be taken at the moment of landing within the boundary of the control, where the official time-keepers will be stationed.

6. **Compulsory Resting Time.**—Each competitor must expend a minimum aggregate of 12 hours while his machine is on the ground in the controls in each of the sections 2, 3 and 4. These three periods of 12 hours shall be called "resting time." No competitor shall be permitted to start in section 3, 4 or 5 until the 12 hours "resting time" shall have elapsed in sections 2, 3 and 4 respectively. A competitor may expend as much as he likes of his "resting time" at the starting control in Sections 2, 3 and 4, but after having been once officially started from any control, the whole time until he reaches the next control will be counted as flying time.

7. **Starting Place.**—The start will be made from Brooklands on Saturday, July 22nd, 1911, at 3 o'clock p.m.

8. **Order of Starting.**—The order of starting from Brooklands will be drawn by lot and announced seven days prior to the start of the competition. Each aeroplane will be allotted a number which will correspond with the order of starting. This number must be displayed on the aeroplane in conspicuous places approved by the officials.

9. **Starting.**—The aeroplanes must be on the starting place 15 minutes before the time of starting, and any competitor failing to start within 3 minutes of his official starting time must remove his



The Blackburn "Mercury" monoplanes entered for the *Daily Mail* Circuit of Great Britain, to be piloted respectively by Mr. B. C. Hucks and Mr. Conway Jenkins.

aeroplane out of the way if and when so ordered, and shall only be allowed to restart with the sanction of the official starter, and his time shall be taken as from the original order to start.

10. **Start from Hendon.**—The competitor who makes the fastest elapsed time from Brooklands to Hendon shall start first from Hendon at 4 a.m. on Monday, July 24th, 1911, the others following at intervals determined by the difference between the time of their respective flights and the time of the fastest flight.

11. **Time Cards.**—Each competitor before starting will be supplied with a time card on which will be entered his time of arrival and departure from each control. The competitor is alone responsible for the safe custody of his card and for its being produced and entered up at each control and for the production of same when duly called upon.

12. **Stoppages.**—Stoppages *en route* between the controls are not prohibited.

13. **Timing.**—Competitors will only be timed from the departure from any one control to the arrival at the next control. The time taken to accomplish each section will be the times which have elapsed between the departures and arrivals at the various controls within

the section, with the addition of any time spent in the controls in each of the sections 2, 3 and 4 over and above the 12 hours' "resting time."

14. **Repairs.**—Individual replacements and repairs to the aeroplane and motor may be made, but neither may be changed as a whole. Five parts of the aeroplane and five parts of the motor will be stamped or otherwise marked, and at least two marked parts of each of these five must be in place on arrival at each control. Landing chassis and propellers will not be marked.

15. **Identification of Aeroplanes.**—Competitors must have their aeroplanes completely erected at Brooklands not later than 10 a.m. on Thursday, July 20th, 1911, in order that they may be marked by the officials. Any competitor not having his aeroplane ready by the specified time will render himself liable to exclusion from the contest.

16. **Examination at Final Control.**—Each machine on arrival at the final control must remain on the ground for exhibition and examination for at least 24 hours from the time of arrival.

17. **Shed Accommodation.**—Accommodation for his aeroplane will be provided free to each competitor at Brooklands from 9 a.m. on Saturday, July 15th, 1911.



The Royal Aero Club of the United Kingdom

OFFICIAL NOTICES TO MEMBERS

Committee Meeting.

A MEETING of the Committee was held on Tuesday, the 18th inst., when there were present:—Mr. R. W. Wallace, K.C., in the Chair, Mr. Ernest C. Bucknall, Prof. A. K. Huntington, Mr. F. K. McClean, Mr. J. T. C. Moore-Brabazon, Mr. Alec Ogilvie, Mr. Mervyn O'Gorman, Mr. C. F. Pollock, and Harold E. Perrin, Secretary.

1. **New Members.**—The following new Members were elected:—C. H. M. A. Alderson, Thomas Blissett, Capt. Robert Brooke-Popham, John Mackillop Brown, Henry Haverly Hodson Burt, Capt. The Hon. Wentworth Chetwynd, R.N., Henry Edward Fortlage, L. Howard-Flanders, Alan Jocelyn Mander, Lieut. Stephen Hewitt Sutton Moxly, R.N., W. Ridley Prentice, Hubert Francis Gardner Roose, Francis George Sherlock, and Guy Standing.

2. **Aviators' Certificates.**—The following Aviators' Certificates were granted:—

104. Gerald Napier.
105. Lieut. T. Gerard Hetherington.
106. C. L. Pashley.
107. H. De Grey Warter.
108. Captain C. R. Brooke-Popham.

The Committee considered the evidence produced on the subject of the flight of Mr. D. Graham Gilmour through London, over the Thames, on the 5th inst., and it was resolved that as the evidence proved that the flight did not endanger public safety, no action should be taken in the matter.

The flight of Mr. D. Graham Gilmour at Henley Regatta was also considered. He attended before the Committee, and it was resolved that his Certificate be suspended for one month for flying in a manner dangerous to the public safety.

"Daily Mail" Second £10,000 Prize. Order of Starting.

- | | |
|--------------------------------|---------------------------------|
| 1. Andre Beaumont. | 16. E. C. Gordon-England. |
| 2. H. J. D. Astley. | 17. C. P. Pizey. |
| 3. Brindejonc des Moulinais. | 18. Pierre Prier. |
| 4. R. C. Fenwick. | 19. C. Howard Pixton. |
| 5. Lieut. J. C. Porte, R.N. | 20. S. F. Cody. |
| 6. Ronald C. Kemp. | 21. M. Tabuteau. |
| 7. C. Compton Paterson. | 22. F. Conway Jenkins. |
| 8. O. C. Morison. | 23. Olivier de Montalent. |
| 9. Jules Vedrines. | 24. Gustav W. Hamel. |
| 10. James Radley. | 25. Lt. H. R. P. Reynolds, R.E. |
| 11. G. Blanchet. | 26. Robert Loraine. |
| 12. Lieut. R. A. Cammell, R.E. | 27. B. C. Hucks. |
| 13. E. Audemars. | 28. C. T. Weymann. |
| 14. James Valentine. | 29. H. Wijnmalen. |
| 15. Aviator to be nominated. | 30. Lieut. H. Bier. |

The race for the *Daily Mail* Second £10,000 Prize will start from Brooklands on Saturday, July 22nd, at 3 p.m.

3. **Admission of Members to Brooklands.**—Members of the Club will be admitted free on production of their membership badge. Members will also have the privilege of taking in their motors free. These facilities apply to members only, and any friends accompanying them must pay for admission. These facilities also apply on the arrival home of the competitors at Brooklands.

4. **Entrances for Members.**—On Foot.—All entrances, including the new bridge over the track at the back of the flying sheds near Byfleet.

Members' cars will be admitted to—Public Enclosure: Entrance, Byfleet Gate; The Track: Entrances, Byfleet Gate for cars approaching from Byfleet; Competitors' entrance (Boxall's Lodge) for cars approaching from Weybridge.

Cars on the track will be parked facing inwards on the Oyster Lane curve from the eastern corner of the flying sheds round to the Cobham Bridge.

Cars parked on the track will be able to leave by moving in a reverse direction to the ordinary circuit of the track and entering the paddock by the road used by racing cars on their return from a race.

To all above-mentioned points members wearing their badges, together with their car and uniformed driver, will be admitted free.

For admission to the immediate vicinity of the sheds an extra charge of 5s. for all visitors alike, including members, will be made.

The amount will be payable at turnstiles fixed at the eastern corner of the flying sheds.

On this occasion luncheon will be served only in a large marquee adjoining the track and near the flying sheds.

At all other points where refreshments are served there will be no set luncheon, but buffet refreshments and drinks will be obtainable.

5. **Admission of Members to Hendon.**—The first Control after leaving Brooklands is at Hendon, and the competitors are expected to arrive there from 3.15 p.m. onwards.

6. **Sunday at Hendon.**—The competitors will remain at Hendon on Sunday, July 23rd, 1911.

7. **Start from Hendon.**—The competitors will start from Hendon at 4 o'clock on Monday morning, July 24th.

Members will be admitted free to Hendon on the above three days on production of their membership badges. Members will also have the privilege of taking in their motors free. These facilities apply to members only, and any friends accompanying them must pay for admission.

8. **Other Controls.**—Harrogate, Newcastle, Edinburgh, Stirling, Paisley, Carlisle, Manchester, Bristol, Exeter, Salisbury, Shoreham. Arrangements have been made for members to be admitted free to any of these controls on production of their membership badges.

HAROLD E. PERRIN,
Secretary.

166, Piccadilly.

FROM THE BRITISH FLYING GROUNDS.

Royal Aero Club Flying Ground, Eastchurch.

ALTHOUGH there is nothing particularly striking to record this week, yet there has been quite a large amount of practice work by the Naval officers, several really praiseworthy flights having been accomplished. The fact of the matter is that we have become so accustomed to the work of these aviators that it requires something quite out of the ordinary to move us to enthusiasm.

Having explored Sheppey from end to end, and at the same time taken in a goodly portion of the mainland as well, the officers are at present devoting their attention mainly to flights conducted with the idea of gleaming all they can of the problematical air currents, and other interesting experiments. In the early morning of Tuesday of last week Lieuts. Samson and Gerrard made several short flights in a fairly strong breeze.

On Wednesday Lieuts. Samson, Longmore, Gerrard and Gregory all made long cross-country passenger-carrying flights on their Short biplanes. There was a strong N.E. wind blowing at the time, which, up aloft, was computed to be quite up to 30 m.p.h., and the skilful handling of the machines, which flew quite steadily, was much admired by all who witnessed the flights.

Thursday witnessed another long spell of practice work by all four Naval officers. Lieuts. Samson and Longmore on their Short biplanes, and Mr. Alec Ogilvie on the "Baby" Wright, were all flying together at a good altitude, and with Lieut. Dunne on his monoplane (who was also making straight flights at the same time) they made quite an animated picture. Lieuts. Gregory and Gerrard were later both flying together, the former covering the greater part of the island in his flight, and landing with a well-judged *vol plané* from 1,800 ft.

Early on Friday morning, although rather misty, Lieuts. Samson and Gerrard made a number of good flights, and later in the day all four officers carried out long cross-country flights in addition to numerous flights in the vicinity of the aerodrome. Lieut. Gregory again made almost a tour of the island, touching Leysdown, Eastchurch and Minster, then out to sea for a mile, and keeping at that distance from the coast he passed Sheerness and round Garrison Point to Queenborough and Kingsferry back to the aerodrome, landing with a *vol plané* with engine stopped from 1,700 ft.

Lieuts. Samson and Gerrard, who were both in the air together, gave good exhibitions, the former making figures of eight, and right and left-hand turns in faultless style, and descending with one of his now well-known spiral glides. He was very shortly in the air again, carrying Mr. Travers as passenger, and he gave another high-class exhibition before bringing the machine down gracefully again, this time for the night.

On Saturday morning Lieut. Samson got in some good practice flights before folk were astir, taking advantage of what proved to be the only brief spell of flying weather throughout the day.

Sunday was a blank day, as was Monday, except for short flights in a strong wind by Lieuts. Samson and Longmore.

Brighton-Shoreham Aerodrome.

AFTER spending a few days here since flying over from Paris, Mr. Morison mounted his Morane at 4.50 p.m. on Friday last week and flew to Brooklands, landing there forty minutes later.

Messrs. Metzgar Bros. and Leno's machine is fast nearing completion, and should be ready for trial in a few days.

Great preparations are being made here for the reception of the racers in the *Daily Mail* second £10,000 contest, and for the accommodation and comfort of the public, who will have a splendid opportunity of seeing the men and their machines for 1s., 2s. 6d., and 5s. each person, while cars, including the chauffeur, can enter at 5s. or 10s., according to the enclosure chosen. Holders of season tickets are admitted free.

Brooklands Aerodrome.

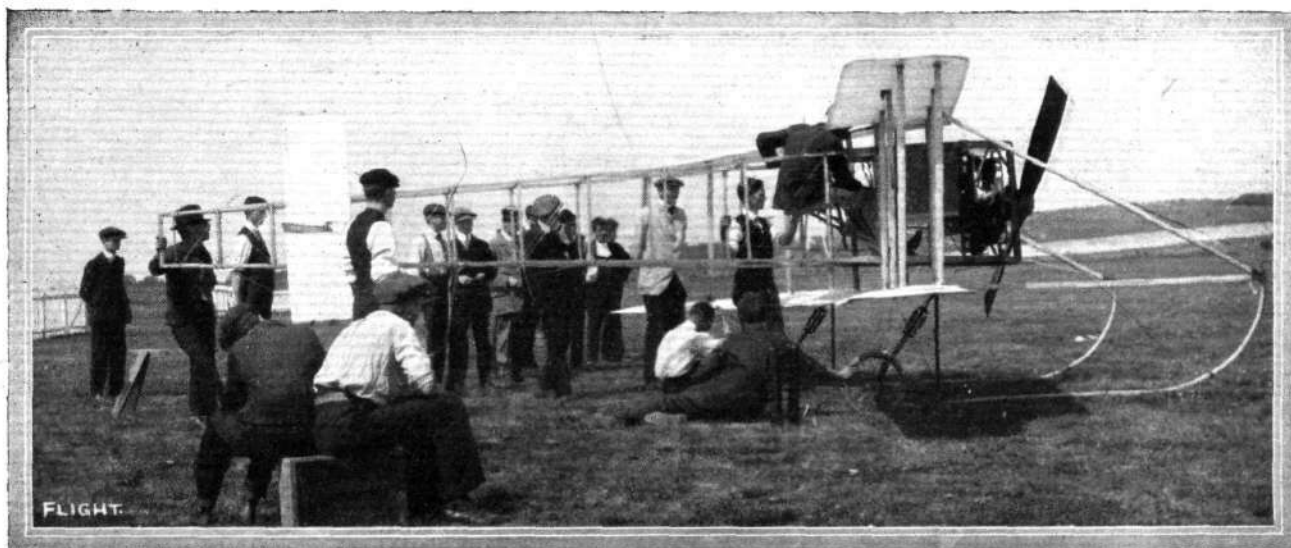
ON Wednesday of last week no flying was possible, the anemometer registering up to 30 m.p.h. The next day was equally blank. Mr. O. C. Morison on Friday created a diversion when he arrived here from Shoreham in 40 mins. on the Morane-Borel monoplane entered for the *Daily Mail* Race. His machine was sighted some time before landing, and was fascinating to watch in the brilliant sunshine, landing after a smart turn, raising the dust owing to the speed of the machine. Lieut. Watkins, out on the Howard Wright biplane, also entered for Saturday's race, made short rapid flights.

The Walton and Edwardes biplane is just finished. The engine is placed unusually high, the struts connecting the two planes being about 18 ins. longer than on a Farman. After tuning up during the day a start was made, but in a 30 yds. run the machine wobbled and one of the wheels gave way, causing a lurch which made it impossible to continue.

Mr. Pixton, flying his Bristol, carried out some good flights. A Bristol pupil, Mr. De Grey Warter, flew for his *brevet*. Getting up neatly, his first circuit was wide, but the remainder were made very steadily, keeping over the green in front of the hangars at an average of 80 ft., and finishing well on the mark. In the second course, taking off the ground in a 15 yards run and making for 100 ft. altitude, the machine was steered in fine style, landing after a left-hand turn. The observers, Messrs. Poynter and Johnstone, not being satisfied with the altitude, Mr. de Grey Warter will fly again to qualify for this test.

Mrs. Hewlett, as passenger pupil under Mr. Blondeau, made a number of circuits, Mrs. Hewlett controlling the lever. Mr. Brown, of the same school, made some fast flights on the school Farman, and looks like soon being ready to take his certificate. Lieut. Watkins was out on Jack Dare's Howard Wright with passenger, Mr. Johnstone taking his place on descending. The new Avro biplane, specially built for school work, was at work, Mr. Hunter doing rolling and straight flights.

A decided change in temperature, with a rough wind, was experienced on Saturday. Mr. S. F. Cody arrived from Farnborough early, with the intention of flying for the Manville prize, but unfortunately a mishap to the shaft of his propeller put him out of the running at Brooklands. He was obliged to hurry back to get in his flight at Farnborough on the new Cody biplane. This machine is credited with getting up very quickly, the trouble with the engine having been found to be caused by the propeller being too large. A smaller one was tried, and now the E.N.V. engine is running perfectly.



Mr. Macfie's V-shaped biplane, which made its first appearance at Brooklands on Tuesday, but had to retire from the Circuit of Britain owing to the chassis being damaged.

A characteristic flight by Mr. Pixton for the Manville prize was made in a high wind, the passenger having a roughish time. Starting at 3.43 he made a splendid continuous flight lasting 1h. 1m. 20s. This puts him in a very strong leading position, the runner-up being Mr. S. F. Cody.

As foretold last week, Mr. Hamel paid his visit to Brooklands, flying over from Hendon on his Blériot. Mr. O. C. Morison was flying the Morane-Borel monoplane, making wide circuits outside the aerodrome for some ten minutes, waiting for Mr. Hamel to join him. They both eventually started for Hendon, Mr. Morison leading by about a mile. At this time a couple of the balloons from Hurlingham were in sight, coming up from the S.E., and drifting past Brooklands in a S.W. direction, created a languid interest amongst the watchers.

On Sunday the heat wave returned. Excitement prevailed when it became known that the common outside Weybridge Station was on fire. With everything here as dry as tinder, folk began to ponder, and it should be a strict injunction to smokers to avoid dropping lighted matches or cigar ends near the hangars. Although the heat was intense there was no flying, as the wind had gone up to 30 m.p.h., and the intrepid Mr. Pixton having departed for Bristol no one else ventured. At 8.10 p.m., however, a monoplane was sighted, which proved to be Mr. O. C. Morison on the Morane-Borel, appearing like a bolt from the blue, and making a beautifully gradual descent. The speed was terrific, he having the wind behind him; at the first touch the left wheel buckled, and the stay above it snapped, causing the wing to dip on that side. Owing to the sudden check, the machine vaulted clean "head over heels," coming down on its back with a thud. For half a minute there was no sign of movement, but then Mr. Morison emerged from under the machine, being, in some miraculous way, unhurt. All this happened in mid-field while men were running to render assistance and to congratulate Mr. Morison on his fortunate escape. The flight from Hendon (20 miles) was accomplished in the remarkable time of 12 minutes. Things were not very serious with the machine either, the petrol tank having emptied itself on the ground, and the left wing being torn away at the shoulder. Strange to say the propeller was not damaged.

Mr. Macfie took out his V-shaped biplane on Monday last for its first trial. It appeared as if the engine were placed too far forward, as when the plane started to travel the weight caused the front skids to rest on the ground, impeding the speed. These finally getting strained out of place one of them fouled the propeller, which broke to pieces. Its retirement was therefore a necessity, and no doubt the undercarriage will now be considerably strengthened.

Great interest was taken in Mr. Valentine and the Deperdussin monoplane which he took up for a spin, climbing to about 500 ft. in a few minutes. Steering out as far as Weybridge he was flying in places at a rare pace, eventually landing after a fine flight. It is interesting to note that most of Mr. Valentine's flying in the European Circuit was done at a height of 4,000 ft.

Mr. Gordon-England and Mr. Pizey arrived on Tuesday from Salisbury at 6 o'clock a.m. on the Bristol biplanes which they will

use in the Circuit of Britain—time on the journey one hour. Mr. A. V. Roe had the racing Avro out in the morning. During a test of the propeller a wire snapped, and damaged the propeller so as to render it useless. A duplicate was immediately forthcoming, and she was out again in the afternoon. This machine looks the picture of a racer. The fuselage is covered in, and the wind guard being painted to match, gives the effect of good lines. Again in the evening Mr. Kemp, who will pilot the Avro on Saturday, took it out for a trial, rolling it along at first. Getting up speed on the return, it travelled fast, and met with the approval of the pilot, who is satisfied that with a little more fine adjustment she will be going strong. Mr. Raynham was out on the Avro-Farman, and others at work were Mr. Johnstone on Jack Dare's Howard Wright doing steady flights at 500 ft., and Mr. Percival on the Billing. Lieut. Barrington-Kennett, of the Air Battalion, was putting in some clever flying. Lieut. Reynolds was trying the racing Howard Wright with a view to piloting it on Saturday, instead of Mr. H. Pequet. Finally, at 8.30, Lieut. R. A. Cammell arrived on his two-seater 70-h.p. Blériot from Salisbury, doing the journey in 42 minutes.

The Bristol Co. are closing their hangars for ordinary business until after the great Circuit of Britain race. Mr. A. V. Roe's sheds are like beehives, all hands are hard at it, and the racing Avro is constantly being overhauled by as many as six pairs of hands at once.

A Vickers R.E.P. monoplane has arrived, and is at rest in one of the new hangars built for this firm. The Air Battalion biplane, with Lieut. Barrington-Kennett in charge, has had one of the Clift compasses fitted by its inventor during the week.

Filey School (Blackburn Aeroplane Co.)

MR. HUCKS has been making some good cross-country flights on the Blackburn monoplane, although he had a smash on the 14th inst. On the 10th he was able to fly by moonlight from Filey to Scarborough and back, and also circled in the neighbourhood of Bridlington. Altogether, Mr. Hucks was in the air for three quarters of an hour, and the total distance covered, including circling over the Bay at Scarborough, was about 40 miles. On the 14th inst. Mr. Hucks set out to fly from Filey to Leeds for the £50 prize offered by Mr. S. A. Hirst. Before starting Mr. Hucks had made two ascents over Filey and the neighbourhood, and then everything appeared to work very satisfactorily. He started off at a quarter to twelve, and climbing gradually to a height of about 2,000 ft. all went well for about seventeen miles. Then apparently ignition trouble supervened, and he was compelled to land at East Heslerton, about ten miles from Malton. Unfortunately a number of cattle were grazing in the field, and in endeavouring to avoid them the machine was badly damaged. It is hoped, however, that it will be in readiness in time for the *Daily Mail* competition.

Liverpool Aviation School, Sandheys Avenue, Waterloo.

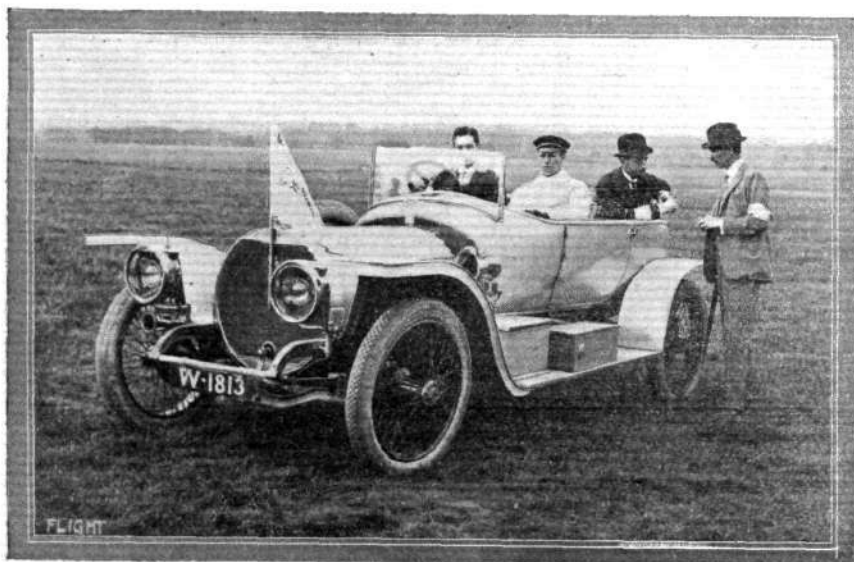
VERY little is doing in the tuition line at the moment, owing to the school engine being under repair.

Mr. H. G. Melly flew to the Liverpool Polo Club Meeting on the 50-h.p. two-seater Blériot, with a passenger (Mr. Duke Broomhall); in a 35-mile-an-hour wind. From the polo ground only one flight was attempted, as the wind had further increased, and a circular flight was made with a passenger (Mr. Harrington), but owing to the situation of the ground, which is lined with trees on the lee side, the descent had to be made down wind, which made landing exceedingly difficult; fortunately it was effected without accident. As the wind showed no sign of abating, the machine was pegged out in the enclosure on the ground and will be brought back at the earliest opportunity.

London Aerodrome, Collindale Avenue, Hendon.

Blériot School.—Very quickly after the departure of the aviators of the European Circuit on the 5th, the school machines were at work. Messrs. Balston, Metford, and Slack were indulging in some rolling practice, while Mr. Dyott was circling the ground, and Messrs. Metford and Hamilton were making straight flights.

On the 6th, the pupils were also able to put in some useful practice. Friday, the 7th, was too windy for air work, but on Saturday, the 8th, weather conditions became a little better, so Mr. Dyott was making some right and left turns. Mr. Hamilton improved very much in his straight flights, and Messrs. Metford and Balston had some rolling practice.



EUROPEAN CIRCUIT.—Mr. W. S. Engall at the wheel of his 45-h.p. 6-cyl. Sheffield-Simplex car, which was used by the *Standard* newspaper during the British section of the circuit. Sitting at the back of the car is Mr. G. Holt Thomas, the Commissaire-Generale for Great Britain, and standing is Mr. Delacombe, who also officiated in connection with this big race.

Nothing at all could be done again until Friday, the 14th, owing to the very strong winds blowing; on that day late in the afternoon Messrs. Dyott, Hamilton, Metford, Jackson and Abercromby were all able to get some practice. The next day was another short one, as after 7 a.m. the wind stopped all air work. Fortunately just before that Messrs. Hamilton and Jackson managed to make a couple of straight runs each. For proficient aviators it was not so bad, and Mr. Hamel flew from Hendon to Brooklands and back, whilst on Monday evening he made another very successful flight, this time from Hendon to Harpenden and back.

Grahame-White School.—Rising as early as 2.45 on Wednesday morning, Hubert, a mechanic, and two personal friends motored over to Ranelagh in order to bring back to Hendon the "Baby" biplane that Grahame-White used for his exhibitions the previous Saturday, and which had been windbound since then.

Hubert is not very deficient in pluck to carry out such a flight, as he had never flown this type of machine before, the controls being a good deal more sensitive than the Farman. Then again the ground was too small to attempt a straight line in order to get the "hang of it." He got away in magnificent style, and disappeared at a height of 1,500 ft. towards Ealing.

On reaching Hendon he planed to earth, despite the wind, which had risen quickly, and which was registering an average of twenty miles an hour on the recording anemometer.

The wind continued persistent throughout the day, which rather spoilt matters for the Women's Aerial League demonstration.

Although no flying took place, the fair visitors were compensated for their disappointment by being conducted through the hangars, Mr. Grahame-White and his pilots explaining the functions of the various machines.

Clement Greswell was busy at instruction work on Friday, taking the pupils up alternately as passengers.

A series of fine thrills was contributed by Paterson on the "Baby," who in the course of a 15 minute flight carried out extraordinary evolutions.

Driver arrived on the ground late in the evening and immediately set out on the school Farman to complete his tests. These he carried out to the satisfaction of the official observers.

Salisbury Plain.

On Wednesday of last week the staff of the Bristol school were busy erecting biplanes entered for the *Daily Mail* race, and flying work was therefore put off till the evening, when Tetard was first out flying at a height of 1,200 ft., finishing with a fine *vol plané*. Mr. Pizey was up on his *Daily Mail* machine, which proved to be very satisfactory. Mr. H. Busteed also made a fine



Mr. H. R. Fleming, pilot, and Mr. C. P. Pizey, passenger, on the Bristol biplane with which they flew from Ventnor to Amesbury, Salisbury Plain, after having visited by way of the air the scene of the Gordon-Bennett Race; then after flying to Dover and Shoreham to greet their brother flyers in the European Circuit, they continued on to the Isle of Wight, and thence back to Salisbury Plain.

flight, while the officers of the Air Battalion, Captains Fulton and Massy and Lieut. Reynolds, were all scouting. On Thursday



DAILY MAIL ROUND BRITAIN CIRCUIT.—The members of the Manchester Committee who are looking after the arrangements on the aerodrome at Trafford Park. In connection with the circuit flight, they are arranging for a three days' flying meeting to take place, at which Mr. H. Melly will give exhibitions. Our photograph shows, reading from left to right, front row, S. B. Bland, O. H. Browne, Howard Cheetham, J. H. Charlesworth, H. V. Roe, J. Hammersley; back row, J. B. Butler, G. H. Fawcus, Harold Mandelberg, G. H. D. Ascoli, W. P. Kemp, Geo. Reeve, H. Coulson Crawford (Hon. Sec.), W. H. Clemson, F. Akenhead, J. Stanlar, P. B. Murray.

morning Mr. Pizey was out again on his new machine, while Mr. Gordon-England had his *Daily Mail* Bristol brought out in the open for the finishing touches to be put to it and the engine tuned up. M. Tetard also made a good flight, and Mr. Watt, one of the pupils, did some useful practice. Lieut. Reynolds was using the Renault - engined Bristol, while Lieut. Cammell made a series of note-dropping experiments from his Blériot when at a height of a thousand feet. Several of the officers were scouting on Friday morning, and in the afternoon Captain Burke arrived back from Farnborough on the Farman biplane. Capt. Massy, Capt. Fulton and Lieut. Reynolds were also seen in the air. At the Bristol school Mr. Pizey was practising on his racer and made a good long flight at a height of 1,000 feet, the machine proving to be very fast and instantly answering the helm. Mr. Gordon-England was also flying for fifty minutes on his new machine and did some remarkably quick turns both right and left hand. He finished with a spiral *vol plané* and on landing had a new propeller fitted as the other one did not seem to be suited for climbing. M. Tetard made a long flight round Fargo, Rolleston, Larkhill and Stonehenge, while Messrs. Busted and Fleming were also up. Although work finished late it was recommenced very early the following morning, Tetard making a start at 4 a.m., and two pupils, Watt and Lawrence, putting in good work, although the latter, through landing on rough ground, broke his propeller. In the evening M. Jullerot returned after a few days' absence, and at once getting into the machine

made a good flight, while Colonel Smeaton also made a very nice trip. Both Mr. Pizey and Mr. England were out practising for the *Daily Mail* contest, which ended in a slight mishap to Mr. England's machine when being piloted by Mr. Pizey. Lieut. Cammell was up for three hours on his Blériot, and was forced to land at Codford owing to the treacherous winds. On Sunday morning several more of the *Daily Mail* machines were being erected and their engines tested, while in the afternoon Mr. Stanley White and Captain Dickson paid a visit to the Bristol hangars. Lieut. Reynolds made two flights, one with a passenger, and Capt. Massy was out on the Farman machine in a strong wind. On Monday morning Mr. Fleming brought out the Bristol school machine, and after a preliminary flight gave some instructions to the pupils. Lieut. Reynolds was also at work, while Capt. Massy had the misfortune to damage the Army Farman. In the evening Tetard was flying on his Bristol, and Mr. Busted executed a couple of circuits at a height of 500 ft., while M. Jullerot made four flights with passengers. Mr. Pixton arrived at the hangars and gave a very fine exhibition flight. On Tuesday morning work was commenced at 3 a.m., as Mr. Pizey and Mr. Gordon-England contemplated flying over to Brooklands. Mr. Pizey took off at three minutes past five, followed three minutes later by Mr. Gordon-England, and each, after a preliminary circuit of the ground, headed off in fine style to Brooklands, where they both arrived safely, Mr. Pizey's time being two minutes under the hour for the 70 miles, there or thereabouts, which gives good promise for the British built Bristols in the great circuit race.

BRITISH NOTES

The Alexander Prize Competition.

THE entries for the second Alexander Prize Competition closed on the 30th ult., and it has just been announced that seven firms have entered machines. They are as follows:—

1. W. L. Adams, Bournemouth.
2. Aero-Flight Engine Co.
3. E.N.V. Motor Syndicate, London.
4. Green Engine Co., Ltd., London.
5. Isaacson Radial Engine Co., Ltd., Leeds.
6. New Engine Motor Co., Ltd., London.
7. Requa Motor Co. of New York, U.S.A.

The engines have to be delivered for testing at the National Physical Laboratory, Bushy House, Teddington, on or before 30th September next.

Mr. Grahame-White at Southport.

THE fates have been very unkind to Mr. Grahame-White during his visits to Southport. Again on Saturday when he visited the town in order to give some exhibition flights by way of compensation for those which the weather prevented during the Coronation Holidays, no flying was possible during the scheduled time of the meeting. It is true that in the morning Mr. Grahame-White made

OF THE WEEK.

a flight on the outskirts of the town, but soon after a smart wind sprang up and no further flying was possible so that the crowd which had assembled had to retire disappointed.

Hydro-Aeroplane at Shoreham.

MR. HAROLD PIFFARD, who last year experimented at the Shoreham Aerodrome with an aeroplane, has now had another machine built, and this is fitted with airbags so that the experiments may be made over water. On Saturday evening Mr. Piffard had it out on the sea at Shoreham for the first time, and although no flight was attempted, six people took their place on the machine and successfully tested its buoyancy. Motive power is provided by a 40-h.p. E.N.V. engine.

Mr. Ogilvie and his Wright Machines.

VERY quietly Mr. Alec Ogilvie, as is his wont, is putting in a good deal of work at Eastchurch with his Wright machines, and last week on the "Baby" Wright he was up to an altitude of 2,000 ft., during which at one time he climbed about 620 ft. in a minute. He has been working up the speed of the "Baby" Wright, and according to the latest test she is doing about 67 miles an hour. Mr. Ogilvie has also been flying his medium-sized machine and altering it with a view to improving its speed.



"Flight" Copyright.

BALLOONS AT HURLINGHAM.—Although on Saturday last owing to the wind the contest for the Hedges Butler Cup was officially declared off, several balloons determined to take their chance and made private ascents. Above is the Hon. Mrs. Assheton-Harbord's "North Star," which was piloted by Mr. C. F. Pollock. Mr. Pollock is seen giving final instructions before letting go, and on the right this 80,000-ft. balloon is seen during the moment when she "brushed" the trees whilst getting clear of Hurlingham.



"Flight" Copyright.

AERONAUTS AT HURLINGHAM ON SATURDAY LAST.—From left to right: Capt. Corbet, Major Baden Powell, who was to pilot Mrs. John Dunville's "Banshee II," Mr. Oswald Short, Mrs. John Dunville, the entrant of "Banshee II," Mr. Tayleur, Mr. J. Dunville, jun., Mr. Goetz, and Consul Stollwerck, who ascended in his balloon "Hannover," and his companion.

Breguets for the British Army.

At last the British Army is to have a Breguet machine, as we learn that a three-seated cruiser, fitted with a Renault engine, similar to that exhibited at the last Olympia Show, has been ordered and will be handed over to the War Office shortly. Our readers will be interested in the description of this machine, with scale drawings, the first part of which appears on page 625.

Bristol Machines in Australia.

SOME interesting details as to the tour of the Bristol mission in Australia have now been published. At the end of the visit to Sydney on May 10th, the machine had made 72 flights in Australia, including 7 at Perth, 34 at Melbourne, and 31 at Sydney; the total distance flown being 765 miles. On 40 occasions the pilot went up alone, on 31 ascents he was accompanied by a passenger, and once, at Melbourne, two passengers as well as the pilot were carried. To conclude the visit at Sydney, five passengers were taken up by Mr. McDonald, the longest trip being with General Gordon, who, during the 36 minutes he was up, was taken over Botany, Bare Island, Centennial Park, Randwick, Victoria Barracks, Rose Bay, and the city. During the 765 miles not a single bolt or wire had to be replaced, a fact of which the British and Colonial Aeroplane Company and the pilots, Messrs. Hammond and McDonald, may well be proud. An aviation school is to be established at Melbourne, with Mr. McDonald in charge.

Maps for Flyers.

SOME time ago we referred to the aviation maps which are being prepared by the Geographia Co. in conjunction with Mr. C. Grahame-White, and we have now had an opportunity of examining the series of maps which have been prepared for the *Daily Mail*.

THE GOVERNMENT AND AEROPLANES.

IN reply to a series of questions in the House of Commons, Col. Seely, Under Secretary of State for War, on Tuesday evening, made an important statement regarding the policy of the War Office as to the training and pay of officer aviators. The statement was as follows:—

"The question of offering a prize or prizes for aeroplanes suitable for military use is receiving careful consideration, but there are difficulties to be overcome, and I am not yet in a position to make a statement on this point. The Army Council has been carefully considering the number of trained observers necessary for our present war requirements, and has come to the conclusion that 80 to 100 officers who are also pilots are required. As our present arrangements do not admit of opportunities for training so large a number, the Army Council is in communication with the various civilian schools of aviation in regard to the training of selected officers and the terms they would consider sufficient, and it is proposed to make a grant in aid of the expenses of such training. When these officers have obtained their pilot's certificate, and have been finally approved by the military authorities as skilled airmen, they will be classed as Army Airmen, and a distinguishing mark will be placed opposite their names in the Army List. They will be

race. These have been greatly improved by the suggestions made by Lieut. Conneau and Garros as a result of their experiences in the European Circuit. The maps are in strip form and on a scale of five miles to an inch, each map showing the country for seven miles each side of the course. On one side of the map is shown the compass settings while on the other side is a contour profile which gives the aviator some idea of the nature of the country over which his course lies. An important feature is that the shape of the towns is shown approximately as this has proved to be a valuable guide, while, of course, railways, roads, rivers and woods are also shown very clearly.

Ballooning from Hurlingham.

A BALLOON race for the Hedges Butler Cup was to have taken place from Hurlingham on Saturday last, but, owing to the unfavourable weather, it was decided to postpone it. Five of the balloons, including Consul Stollwerck's "Hannover," Captain E. M. Maitland's "Pompador," Mr. Gilbert Dennison's "Alpha," Mr. A. Preston Hohler's "Dunlop I," and Mrs. Assheton Harbord's "North Star," however, made unofficial ascents. An exciting incident was witnessed at the ascent of the last mentioned, as it came in contact with the trees, but, fortunately, it got clear without any serious mishap. The "Hannover" landed at Chichester after a trip of 6 hours.

On Sunday the "Banshee II" left Hurlingham in an attempt to win the Royal Aero Club Challenge Cup. Piloted by Mr. C. F. Pollock, it had on board Mrs. John Dunville (the owner), her son, Mrs. Robert Dunville, and Captain Corbet. A splendid trip was made across the Channel, and the balloon descended at Roye (Somme), having covered about 180 miles in 6½ hours.

attached to the Air Battalion for refresher courses at specified intervals. The training of so large a number necessarily will take some time, but a commencement will be made with the least possible delay. A considerable number of mechanics with special knowledge will be eventually necessary, and they will be enlisted as required. As regards remuneration, officers of the Air Battalion and aviation officers when attached will receive Engineer pay in addition to regimental pay, and it is proposed to give such further pay or allowances as will in the opinion of the Army Council make the total remuneration adequate. The Army Council is in communication with the Admiralty and the Treasury as to this, and I hope to be able shortly to make a further statement. The question of the grant of special non-effective allowances to officers and men in case of accident when engaged in aviation is under consideration."

A further question as to the advisability of purchasing aeroplanes which have been proved to be suitable by foreign Governments elicited the reply that more machines had been recently purchased and the War Office would continue to purchase them as and when required, but the advance in the science was so rapid that to buy a large number at once would be a great mistake.

FOREIGN AVIATION NEWS.

Judges' Report in European Circuit.

THE following are the official times and cash awards in the European Circuit for the full distance from Paris to Paris, a distance of 1,730 kiloms., as signed by the Commissaires Sportifs:—

		h.	m.	s.	frs.
1. "Beaumont" ...	...	58	38	0 $\frac{1}{2}$	106,221'80
2. Garros ...	...	62	17	16 $\frac{1}{2}$	42,333'20
3. Vidart... ..	...	73	32	57 $\frac{1}{2}$	16,555'80
4. Védrières ...	...	86	37	2	11,088'95
5. Gibert... ..	...	89	42	34 $\frac{1}{2}$	7,777'90
6. Kimmerling ...	...	93	10	24 $\frac{1}{2}$	5,777'85
7. Renaux ...	...	110	14	5 $\frac{1}{2}$	5,622'30
8. Barra ...	...	206	21	58	4,622'40

240 Kiloms. in Three Hours.

ON his Renault-engined Maurice Farman biplane, Lieut. Cheutin on the 15th inst. twice made the journey from Buc to Chartres and back, covering 240 kiloms. in three hours. His average height was about 1,000 metres.

World's Distance Record Beaten.

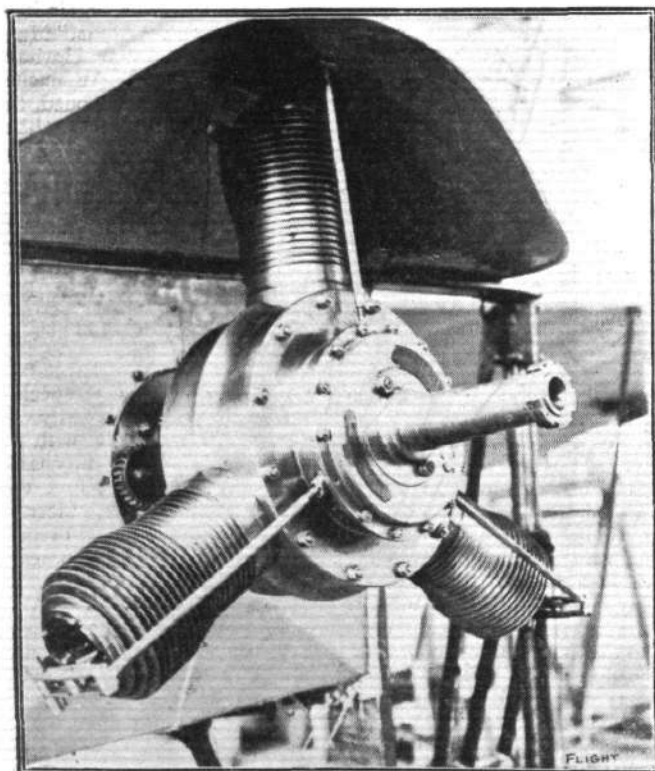
DURING an attempt on the 16th inst. to secure the Grand Prix of the Belgian Aero Club, Jean Olieslaegers on a Blériot monoplane, at Kiewit-les-Hasselt, succeeded in covering 635'2 kiloms. in 7h. 18m. 26s. This beats the world's distance record of Tabuteau, who during his flight for last year's Michelin Trophy covered 584 kiloms.

An Early Attempt for the Michelin Trophy.

VERY early on the morning of the 12th inst., Loridan at Mourmelon started off on one of the racing Henry Farman biplanes, on an attempt to win the International Michelin Trophy. In spite of the wind he was able to cover 300 kiloms. at an average speed of 90 k.p.h., but he was then obliged to come down owing to the violence of the elements.

Flying Over Roubaix.

ON his Blériot monoplane, which has now been fitted with a 60-h.p. 6-cyl. Anzani engine, Lecoigne was flying on July 11th for an hour and 20 minutes above the exhibition and the town of Roubaix. He finished his flight by gliding down from a height of 1,220 metres.



The latest product of the manufacturers of the Gnome engine.—A 25-h.p. 3-cyl. aerial motor. This is particularly intended for touring machines, and is designed on the same lines as the 50-h.p. 7-cyl. engine.

Legion of Honour for Leblanc and Latham.

AT the review of troops held at Longchamps on the 14th inst., there was a little ceremony which might be noted by British Ministers who are supposed to take an interest in flying matters. The regiments of Engineers, to which Latham and Leblanc are attached as reservists, were drawn up, and the two aviators were called out and decorated by their respective Colonels with the Cross of the Chevalier of the Legion of Honour, awarded them in recognition of their services to military flying.

The Blériot Memorial at Calais.

ALTHOUGH the French have taken a good deal more time than the English to consider the matter, M. Blériot's successful crossing of the Channel is not to go any longer without some recognition on the French side. A monument has been erected at Les Baraques on the spot on which M. Blériot left France on his cross-Channel voyage, and this was unveiled on July 16th in the presence of French and British representatives. After the unveiling ceremony a reception was held by the Mayor at Les Baraques at which the British and French National Anthems were played amidst great enthusiasm.

Accident to a Morane Pilot.

BY way of practising for the *Daily Mail* Prize, Brindejone des Moulinais decided to fly over to Rheims from Issy on his Morane monoplane on Saturday afternoon. The wind was very gusty, and his friends endeavoured to persuade him not to make the attempt, but he had made up his mind and would not be put off. He had risen to a height of 90 ft. and then got into difficulties just as he was close to the "Clement Bayard IV," which was being prepared for a voyage. Fortunately he was just able to rise over the envelope of the airship without doing any damage, but finding it impossible then to land he was obliged to more or less drift across the Seine to Billancourt, where he came down suddenly in a stoneyard. One wing of the monoplane was caught by a crane, and the aviator was thrown out of the machine and seriously injured, so that there is little chance of his participating in the British Circuit. The latest reports, however, are to the effect that he is making good progress.

An Enlarged "Demoiselle."

As the result of their experience with the Santos-Dumont "Demoiselle" with the Moisant International Aviators of the United States, Audemars and Garros have had built a machine, which, although it is of practically the same design as the "Demoiselle," is a good deal larger. It is, moreover, fitted with a 50-h.p. Gnome engine. The fuselage is of the same triangular form, and the cruciform tail is also retained.

Long Flight Along French Frontier.

IT is difficult to conceive the amount of work which is being carried on by the flyers of the French Army, as very few particulars of the flights are now obtainable. A typical instance of what goes on may be cited in a flight made by Lieut. Malherbe on Monday morning, when, starting from Sedan, he flew on his Blériot monoplane past Vouziers, St. Menhoult, and Verdun, and so back to Sedan. He had previously flown from Paris to Sedan.

A Promising Lady Pupil.

MME. DENISE MOORE, who, as we mentioned last week, is taking lessons at the Henry Farman School at Etampes, is making remarkably good progress, and on Monday was allowed by her instructor to make a short flight alone.

Another Deperdussin Pilot.

AT the Deperdussin School at Betheny, near Rheims, on Monday, Mr. D. Lawrence Santoni, having made the three qualifying tests for his brevet, prepared to return to England, and took over several Deperdussin machines, which it is proposed to use in the new school at Brooklands.

Cross-country on a Caudron.

CAUDRON on a Gnome-engined Caudron, and Allard on an Anzani-engined Caudron, flew from Crotoy and circled above Touquet Paris Plage for some time on the 16th inst.

Flying Over the Rhone.

ON his Gnome-engined Sommer machine, Kimmerling, on the 16th inst., started up from the Bron Aerodrome and, following the River Rhone, passed over Lyons to the Mulatiere at St. Claire.

The Belgian Circuit.

It has now been decided that Liege shall be omitted from the course for this event, and the daily stages starting from Brussels will therefore terminate at Monscaesteau, Tournai, Blankenberghe, Antwerp, and back to Brussels. The first prize has been fixed at £800.

Lieut. Bier has a Ducking.

WHILE trying to fly on his Etrich machine from Abbazia to the Island of Veglia, in the Adriatic, for a prize of £250, the Austrian aviator, Lieut. Bier, who is entered for the *Daily Mail* prize, had an unpleasant experience. The machine was caught by the wind, and in order to avoid an accident Lieut. Bier came down on the surface of the sea, where he was tossed about by the waves until rescued by a torpedo boat.

Aviation in Japan.

MR. J. C. MARS, the American aviator whose death is just announced from America, was the first airman to give really successful exhibitions of flying in Japan. His first Japanese ascent was made from the Naruo racecourse near Kobe, and he later gave exhibitions of his skill at Tokyo, Kyoto and Nagoya, before enormous crowds of appreciative spectators, including huge contingents of school children. His demonstration of the ease with which targets may be hit by imitation bombs thrown from an aeroplane in flight greatly interested the general public, half of whom have had practical experience of warfare under trying modern conditions, and are quick to realise new military possibilities. The exhibition no doubt gave a fillip to the national ambition to possess a Japanese air fleet as efficient in its way as the famous Navy. A nucleus already exists in the Military Aviation Committee, with its flying men—of whom Capt. Hino and Saigo, who learned to fly in France last year, are the best known—and its excellent Farman and Wright biplanes.



AVIATION IN JAPAN.—The audiences were as interesting to Mr. Mars during his aviation tour in Japan as his flying was interesting to them. In our photograph Mr. Mars is seen "snapping" a crowd at one of his flight exhibition meetings.

Mr. Mars had the honour of taking up the first lady passenger to fly in Japan, this lady, Mrs. Manwaring, making her flight nonchalantly seated on one of the planes.

Our photographs were taken during Mr. Mars' visit to Nagoya.



AVIATION IN JAPAN.—A back view of a Japanese audience at an aviation meeting at Nagoya when the late Mr. Mars was flying.

Max Olieslaegers has a Mishap.

WHEN starting to give an exhibition flight on his monoplane at Leeuwarden, Friesland, the monoplane of Max Olieslaegers ran among the crowd and four women were injured. The aviator escaped unhurt, but his machine was smashed.

Fatal Accident to Paillole.

WHILE testing his machine on the Maison Carree racecourse near Algiers, before attempting to fly to the military ground where the troops were being reviewed by General Baielloud, the Frenchman Paillole had his machine capsized in a gust of wind and was killed on the spot.

Flying over Washington.

DURING his visit to Washington, Atwood made a flight over the city, and circling the Washington Monument came down in the grounds of the White House, where he was presented with the gold medal of the local aero club by President Taft. On the previous day Atwood made a long flight over the city without alighting.

"Bud" Mars Meets With Fatal Accident.

A FATAL accident which befell Mr. J. C. Mars at Erie, Pa., on Friday last, put a period to one of the most promising flying careers in the United States. The aviator had shown himself to be a most daring pilot of the Curtiss type of biplane, and had met with considerable success both in America and during a recent visit to Japan. On the occasion when he met his death he had just arrived from Chicago, and, although the wind was very troublesome, he did not wish to disappoint the crowd, and so decided to go up. A first flight of a few minutes duration was made successfully, and it was during a second attempt that the accident happened. He was at a height of 500 ft. when the machine first appeared to be out of control. It was then seen to straighten up, and descended all right to within a short distance of the ground, when it fell sideways, pinning the aviator beneath the wreck.

CORRESPONDENCE.

Engine Position and the Strapping-in Practice.

[1273] Several of the recent mishaps have brought to the front the necessity of the pilot being situated behind his engine.

There is no reason, I suppose, once the difficulty has been overcome by constructors, why the pilot should not always have his place behind his engine. The greatest reason of all is, that in the event of a fall, the heavy and substantial part of the machine, which holds the engine in place, will reach the ground first, and there is very little possibility of this being so mangled up that the pilot is seriously injured.

The recent accident to Mr. Hubert Latham at Brooklands shows very clearly the necessity of the engine and substantial part of the aeroplane being in front, the result being that his Antoinette stuck in the roof of the hangar, and nothing gave way, so that he was untouched.

It is also important that during a long flight the pilot can see his engine.

He can, of course, tell if anything serious is wrong with it by its sound, but if it is in front of him he can be continually keeping his eye on it, and can detect any nut or bolt working loose.

A very good example of this reason may be seen in the accident that was averted by the Hon. Alan Boyle last May at Brooklands. He was flying at a height of about 25 ft. when he saw a cylinder head of his Anzani engine about to blow off. He was able to land before anything serious occurred. Had he not seen this, as he would not have done had he been in front of his engine, a serious accident might have taken place. From his accident at Brooklands we can go to his accident at Bournemouth which brings us to the strapping-in question.

It is most difficult to say if it is safest to be strapped in or free.

If Boyle had been strapped in his Avis at Bournemouth he probably would not have been pitched out on to his head and received such a severe concussion. But the recent accident to Lieut. Princeteau, who, through being strapped in, could not extricate himself from his burning machine and so perished, leads us to think otherwise. In such a machine, a Blériot, where the pilot is seated fairly low down on the "floor" of the machine, strapping in seems unnecessary, yet I believe it is thought that Blanchard fell out of his Blériot when he was killed at Issy last October. Smith, who was killed in Russia a short time ago, fell out of his machine when about 200 ft. up.

It seems to me that a pilot of a biplane, such as the Farman, with no sort of protection in front worth considering, would do well to strap himself in, as would a pilot of the Antoinette monoplanes, where there are no sides to the pilot's seat which would prevent

over-balancing, but in such machines as the Blériot and Nieuport, where the pilot is well protected, strapping-in seems unnecessary.

It is a very hard question to decide which is best, and one which I hope will soon be settled somehow or other, by means of appliances which will prevent falling out but not hold a pilot firmly in his seat so that he cannot free himself if needs be.

Dunstable.

ICARUS.

Owing to the heavy pressure on our columns this week, much Correspondence and other regular features are held over.

IMPORTS AND EXPORTS, 1910-11.

AEROPLANES, airships, balloons and parts thereof (not shown separately before 1910).

	Imports.		Exports.		Re-Exportation.	
	1910.	1911.	1910.	1911.	1910.	1911.
	£	£	£	£	£	£
January	2,516	1,196	750	1,088	550	Nil
February	437	3,129	2,950	1,786	—	—
March ...	7,516	11,327	128	1,027	600	357
April ...	6,305	2,110	950	807	1,470	4,343
May ...	846	1,707	400	2,471	350	1,972
June ...	7,961	3,225	642	2,432	558	1,682
	25,581	22,694	5,820	9,611	3,528	8,354

PUBLICATION RECEIVED.

How Men Fly. By Gertrude Bacon. London: Cassell and Co. Price 1s. net.

NEW COMPANY REGISTERED.

Standard Aviation Co., Ltd., 39, St. James's Street, W.—Capital £15,000, in 5s. shares (52,000 pref.). Manufacturers of and dealers in aeroplanes and devices relative to aerial navigation, under agreement with G. P. B. Smith and L. B. Desbleds. First directors, Col. H. S. Massy, G. P. B. Smith, R. O'Connor and L. B. Desbleds. G. P. B. Smith is general manager and L. B. Desbleds is technical adviser.

Aeronautical Patents Published.

Applied for in 1910.

Published July 27th, 1911.

19,440.	W. H. COLEBROOK.	Propulsion of aerial machines.
20,963.	G. ROMAGNOLI.	Flying machines.
24,351.	J. F. F. W. URE.	Aeroplanes, &c.
24,494.	A. ZLOBINSKY.	Dirigible aerostat.

Applied for in 1911.

Published July 27th, 1911.

5,071.	G. MEES.	Stabilizing and steering flying machines.
8,099.	E. MULLER.	Inclination indicators for airships and aeroplanes.

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